

FIG.2

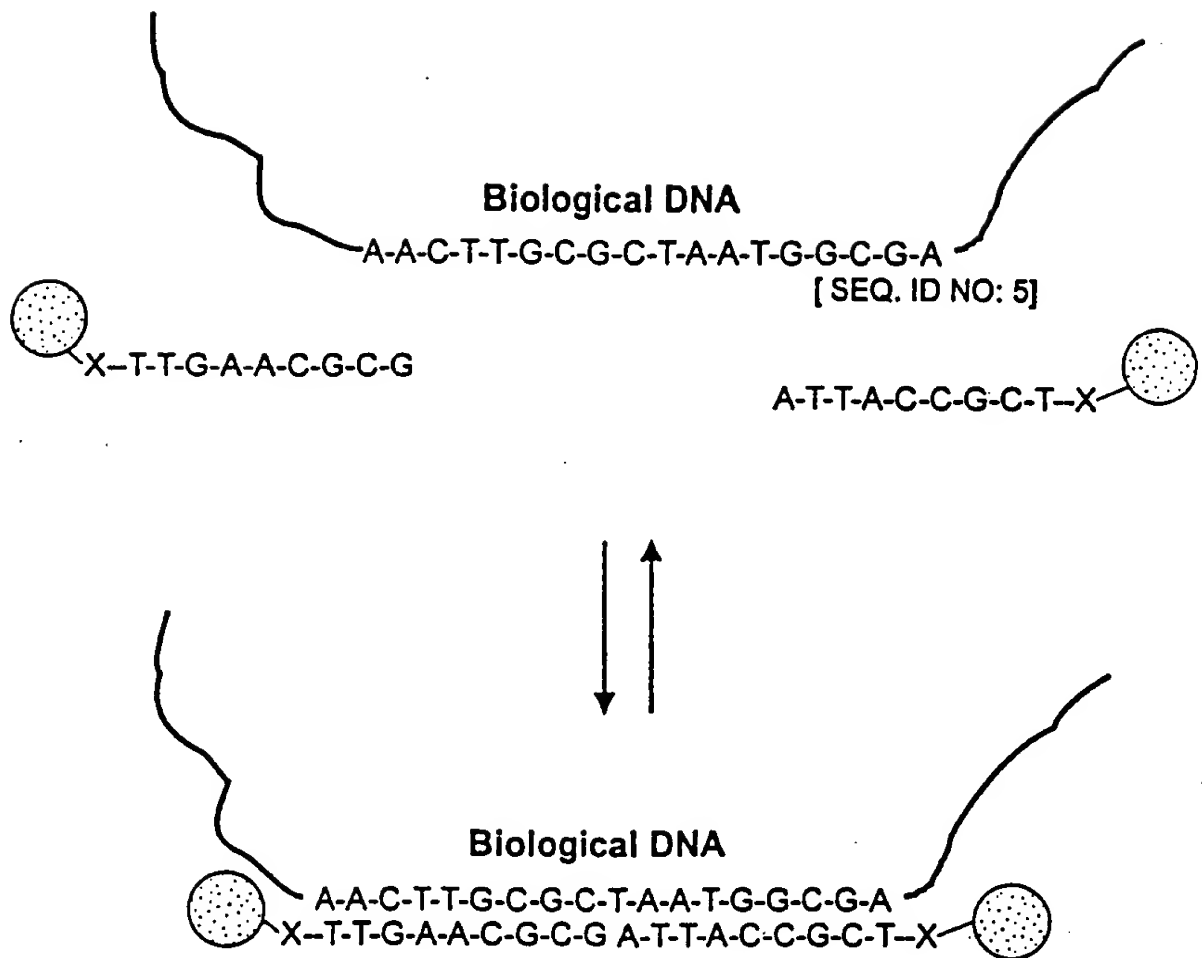


FIG. 2

FIG.3

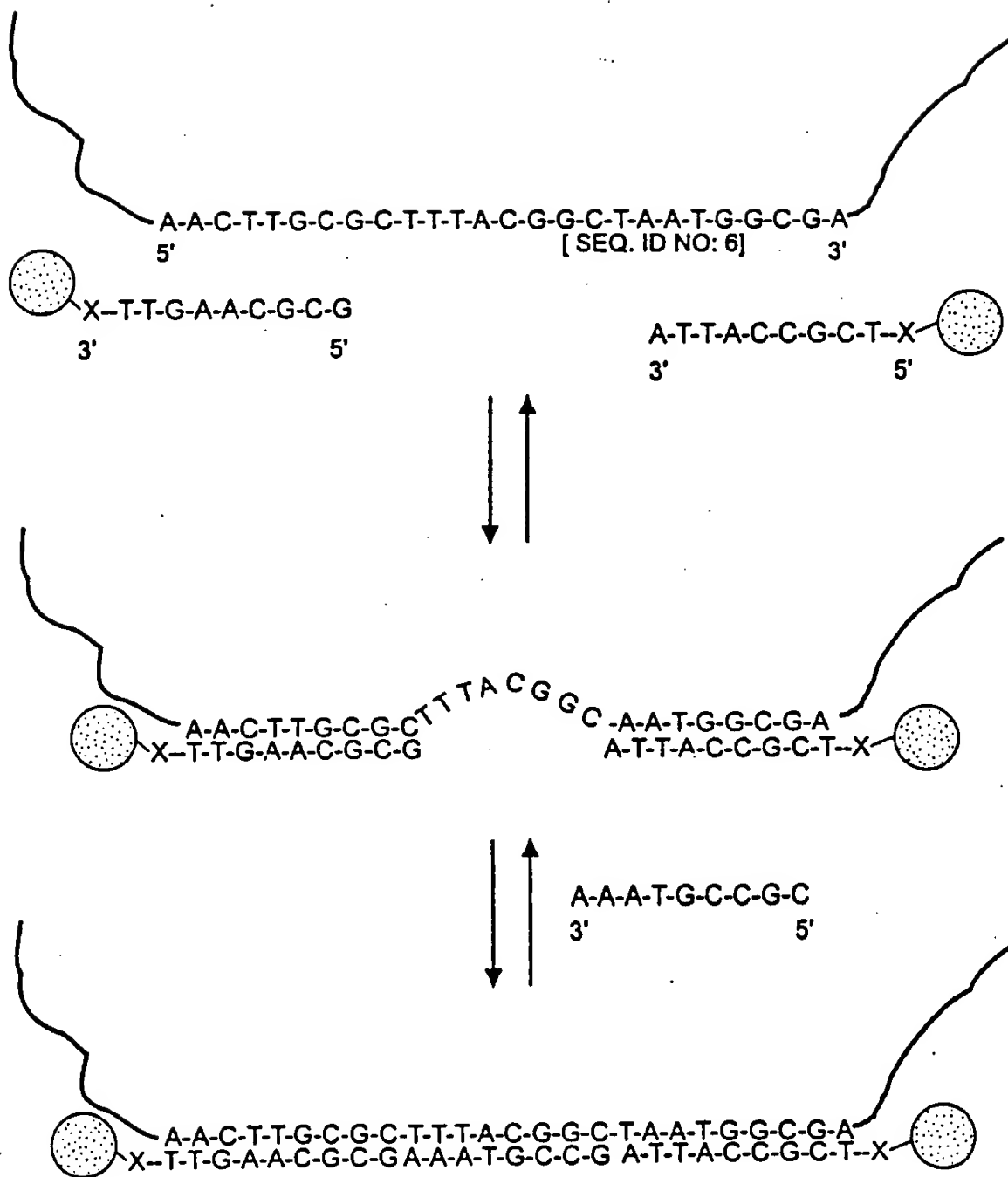
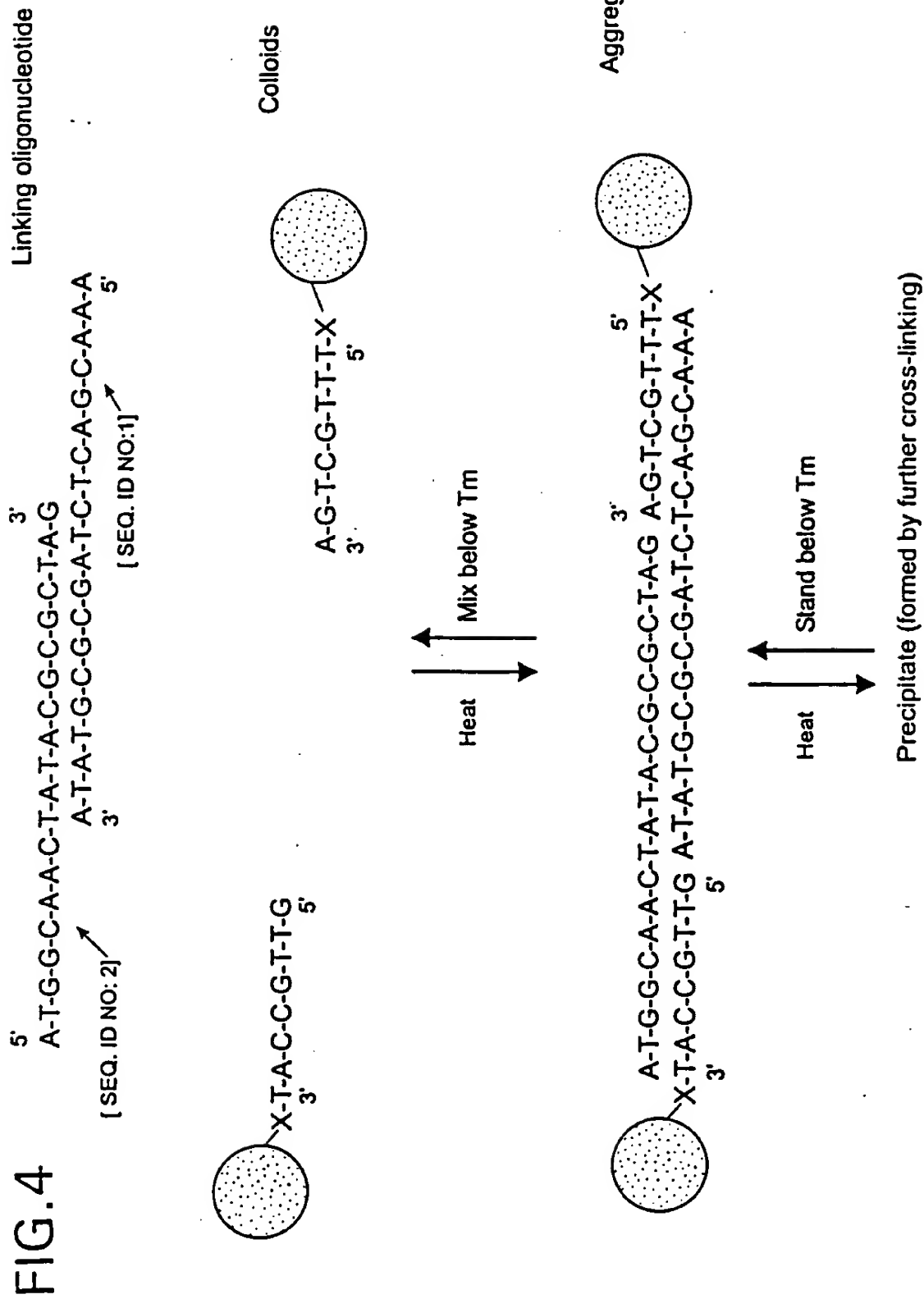


FIG. 3



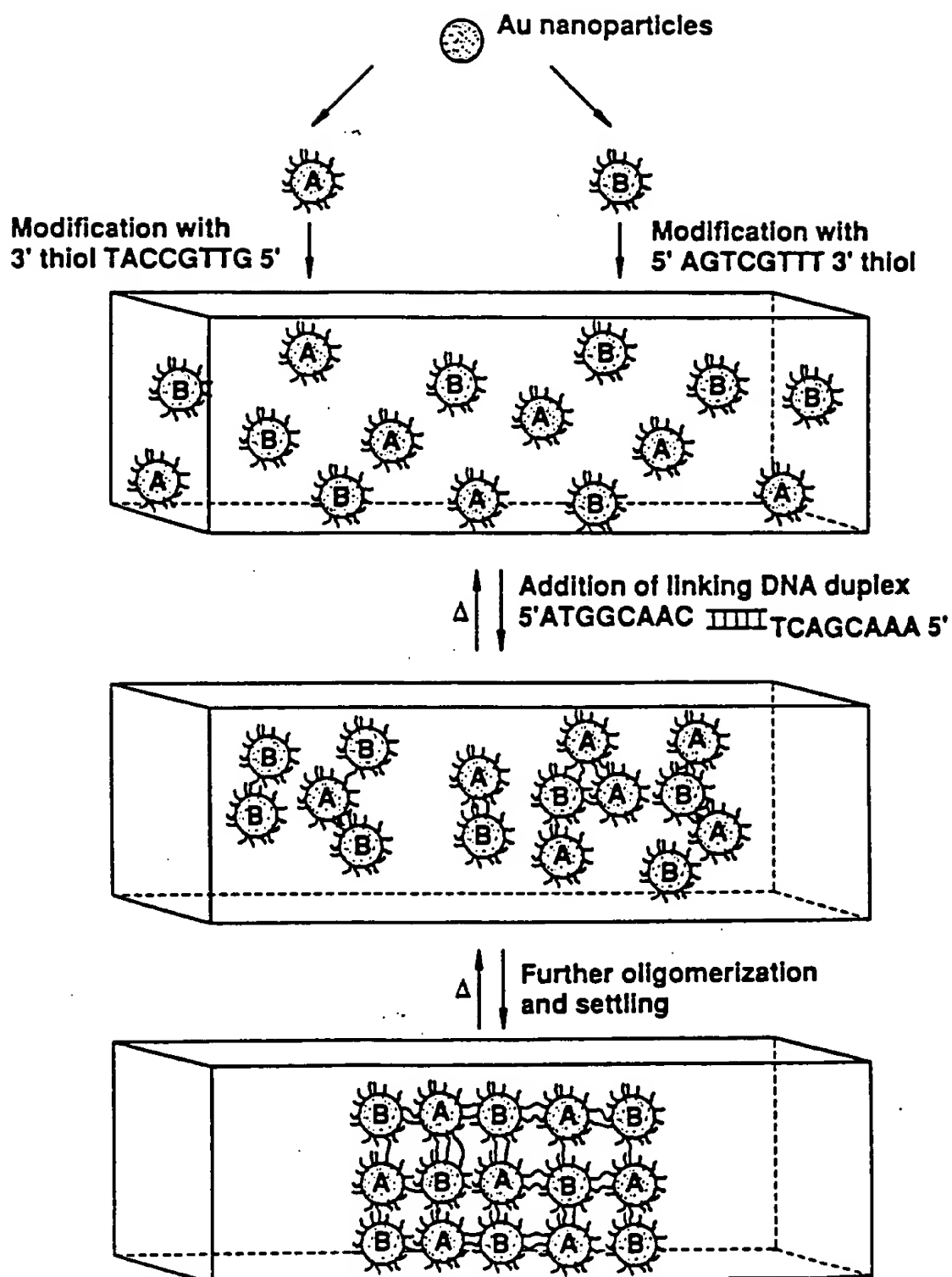
[illegible]

FIG. 6A FIG. 6B FIG. 6C



FIG. 6A FIG. 6B FIG. 6C

FIG.7

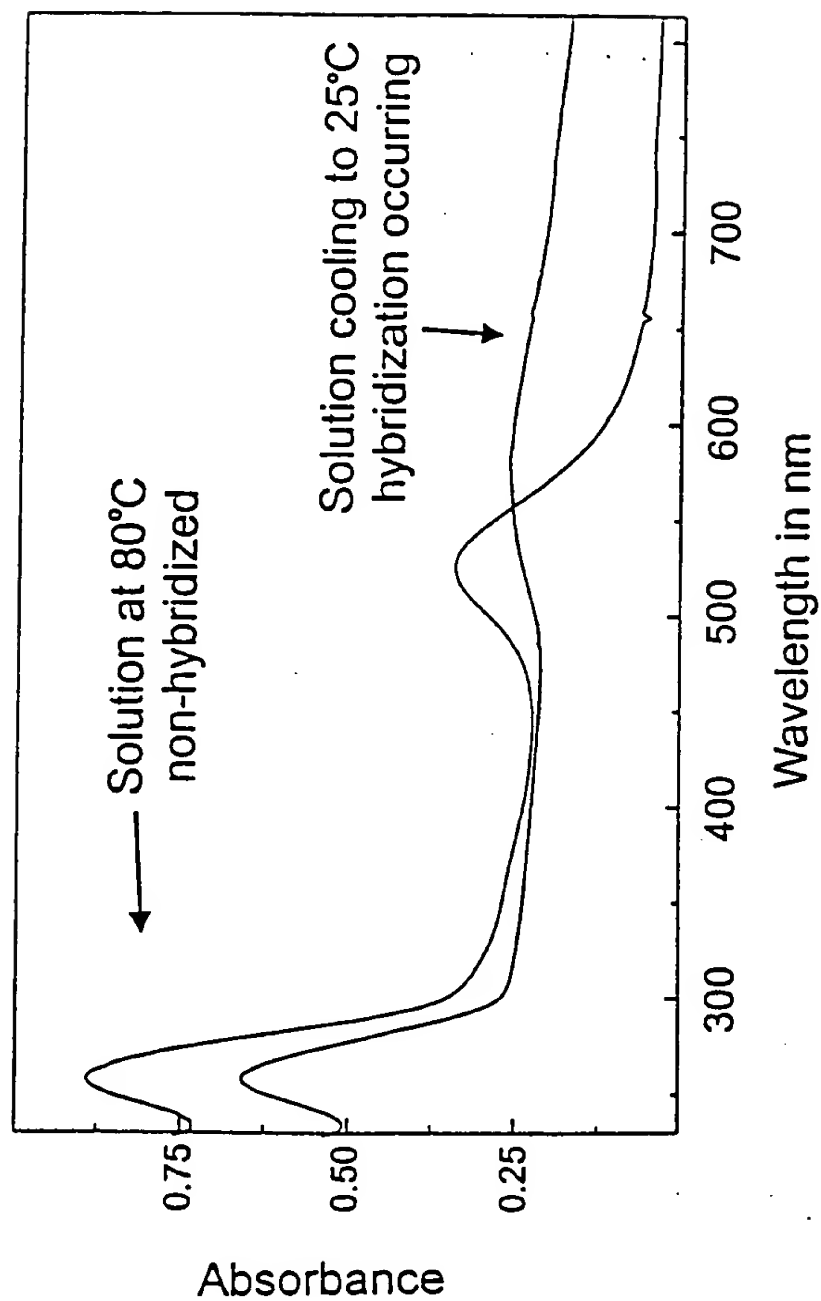


FIG. 8A

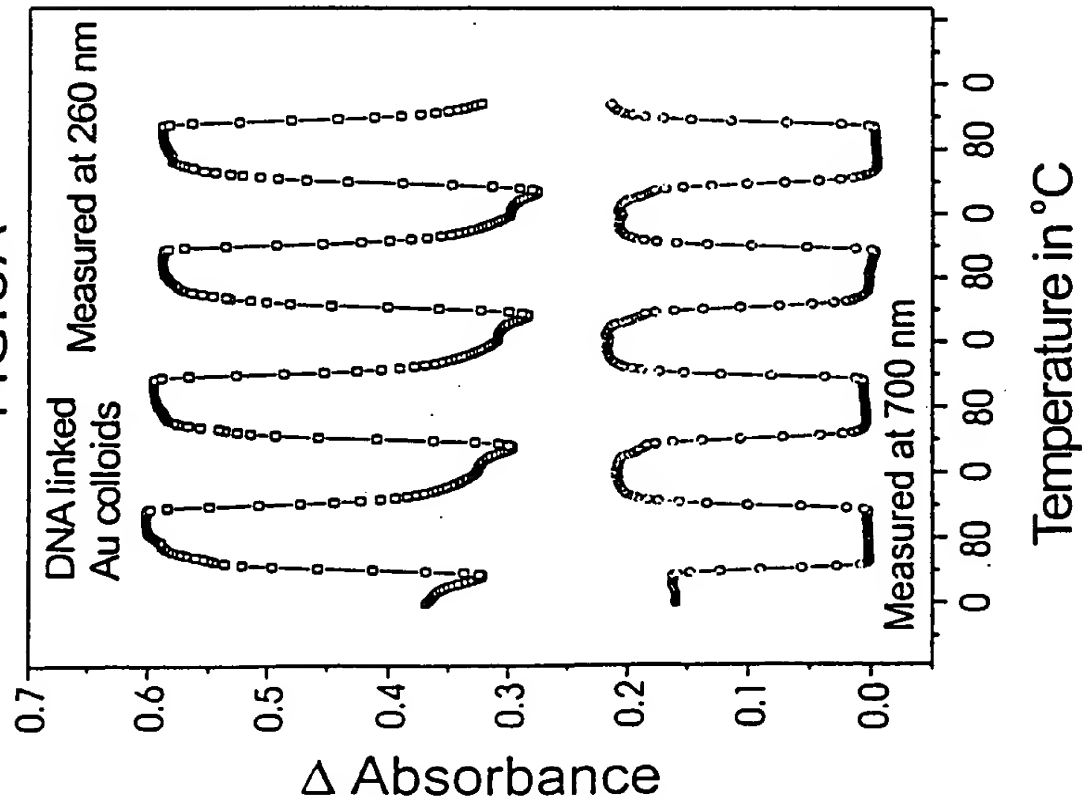
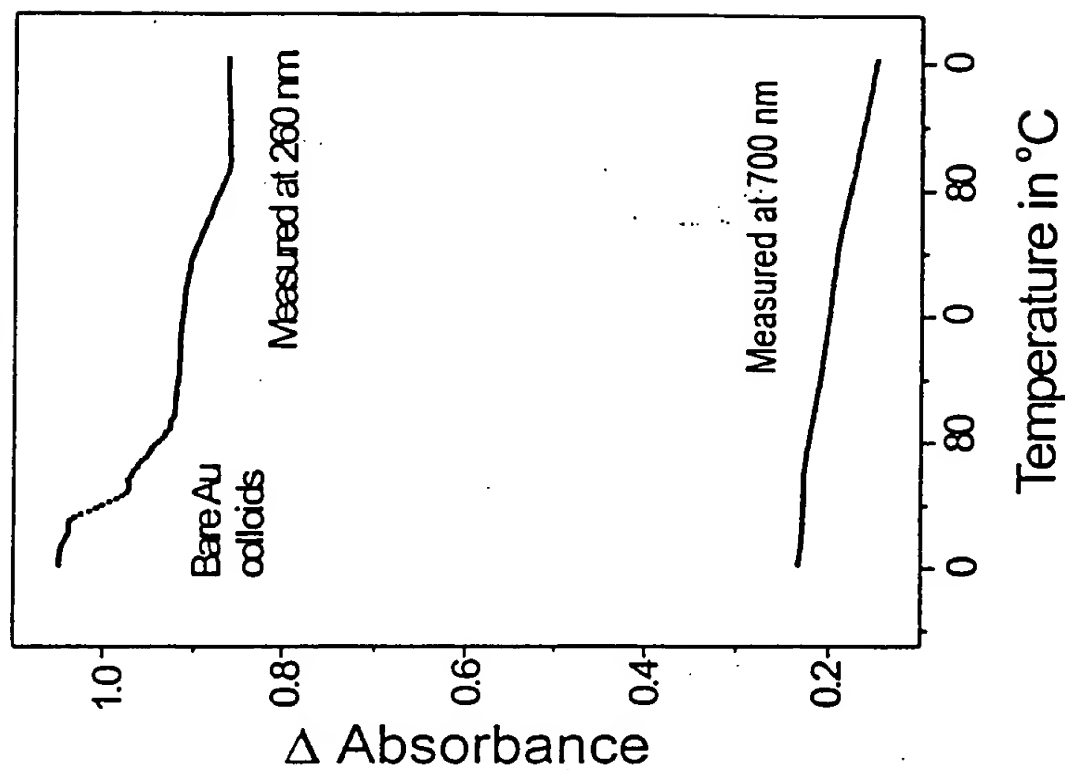


FIG. 8B



00076900-1011
FOI b7D b7C b7E

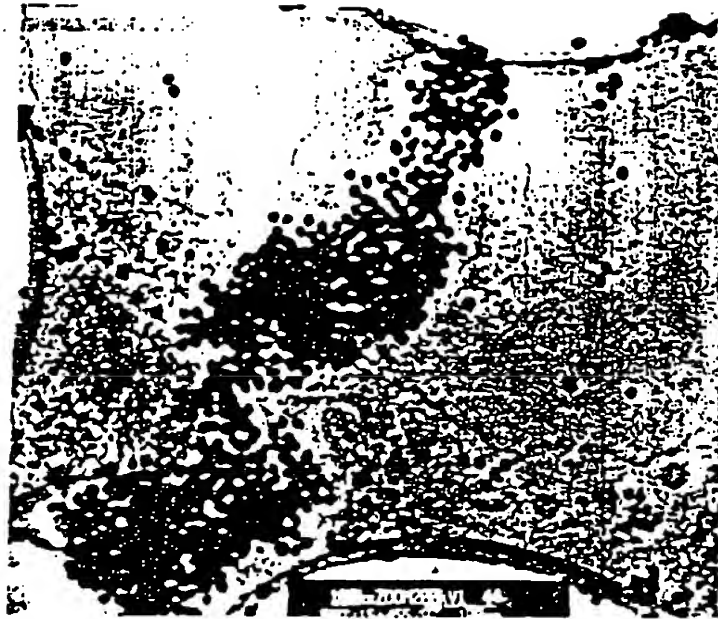


FIG.9A

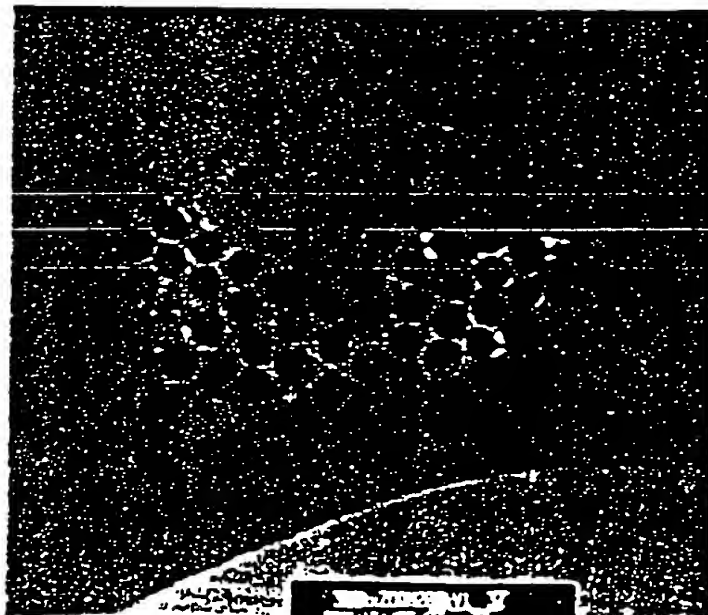


FIG.9B

FIG.10

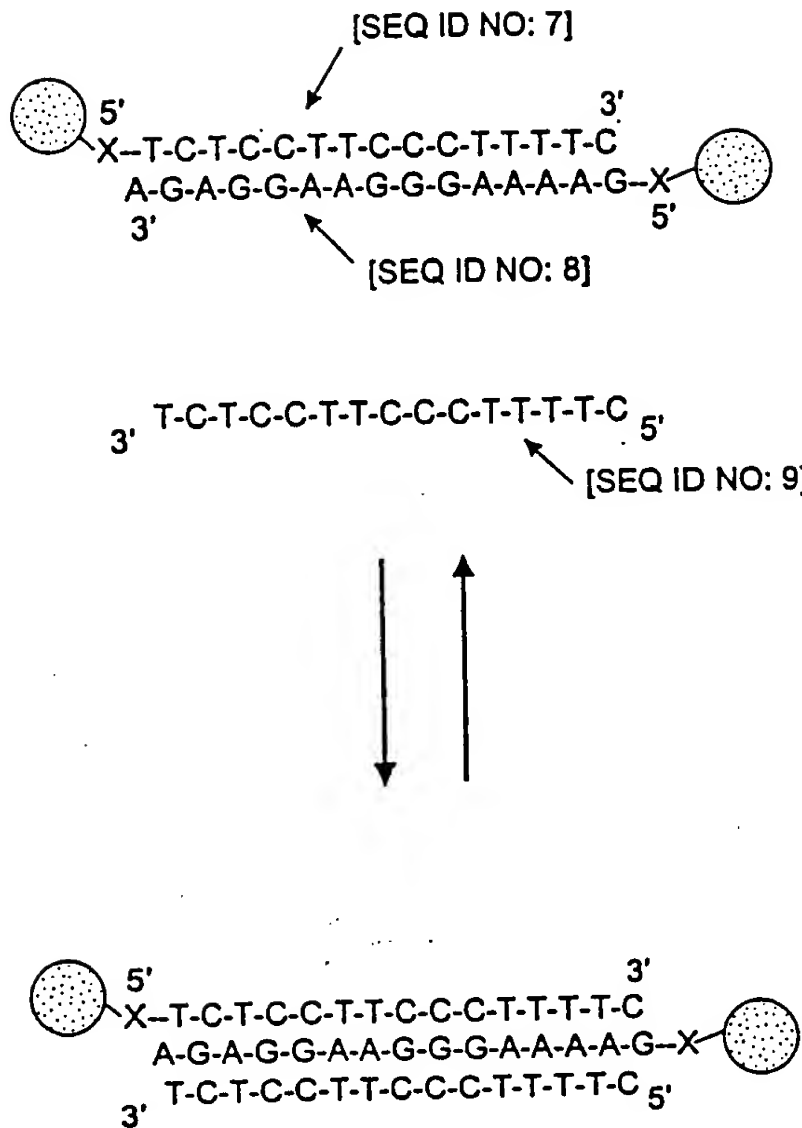


FIG. 11

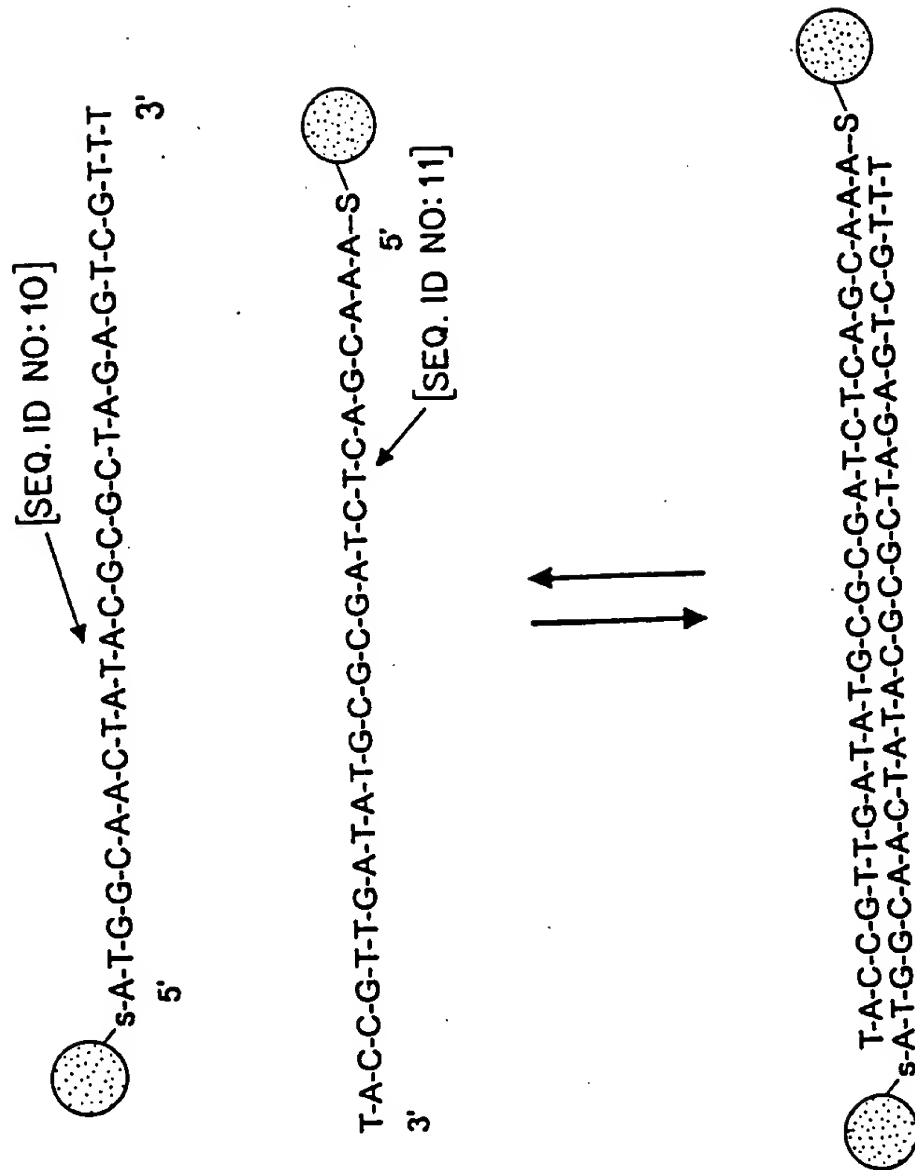


FIG. 12A

Complementary Target

[SEQ. ID NO:12]

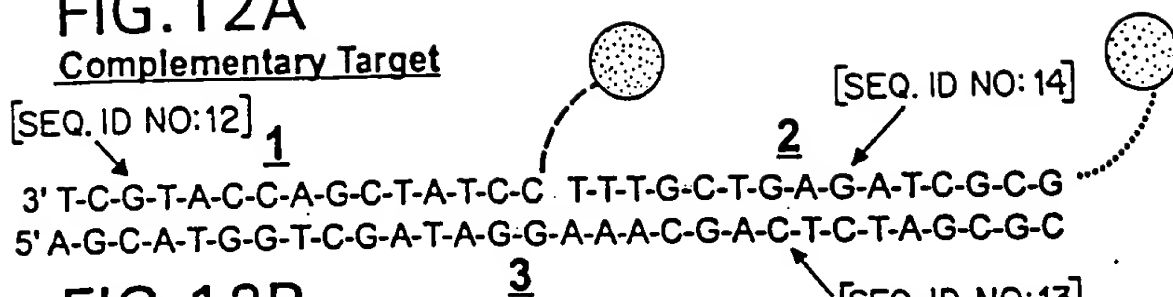


FIG. 12B

Probes without Target

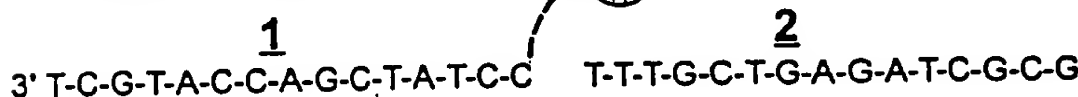


FIG. 12C

Half Complementary Target

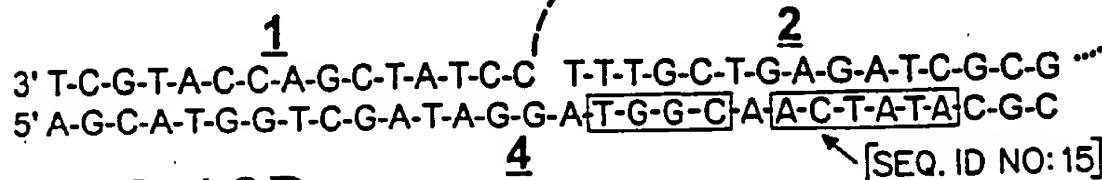


FIG. 12D

Target - 6 bp

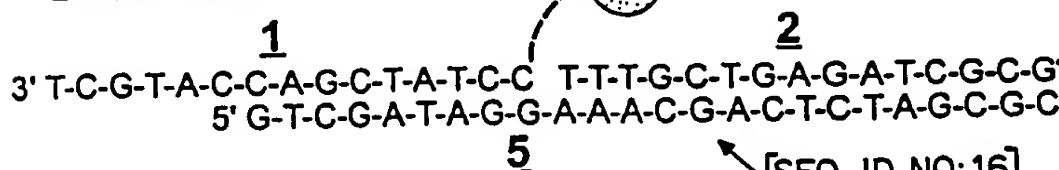


FIG. 12E

One bp Mismatch

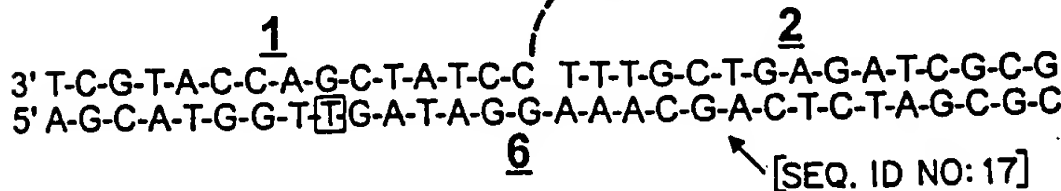


FIG. 12F

Two bp Mismatch

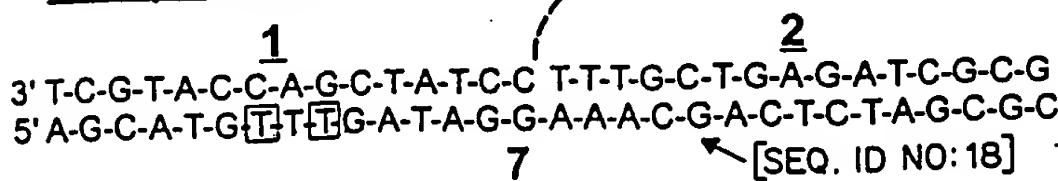
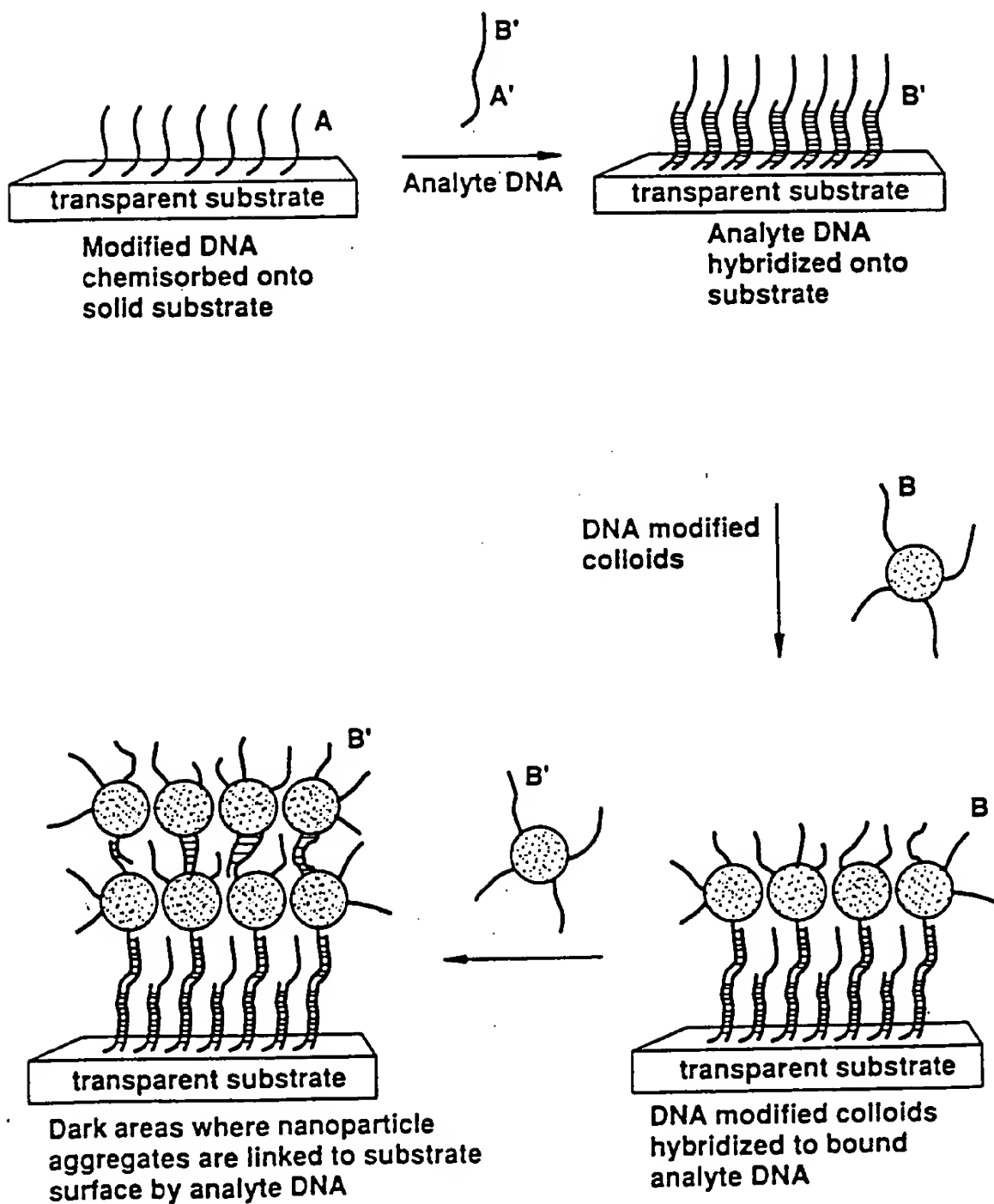


FIG.13A



09976900-101201

FIG.13B

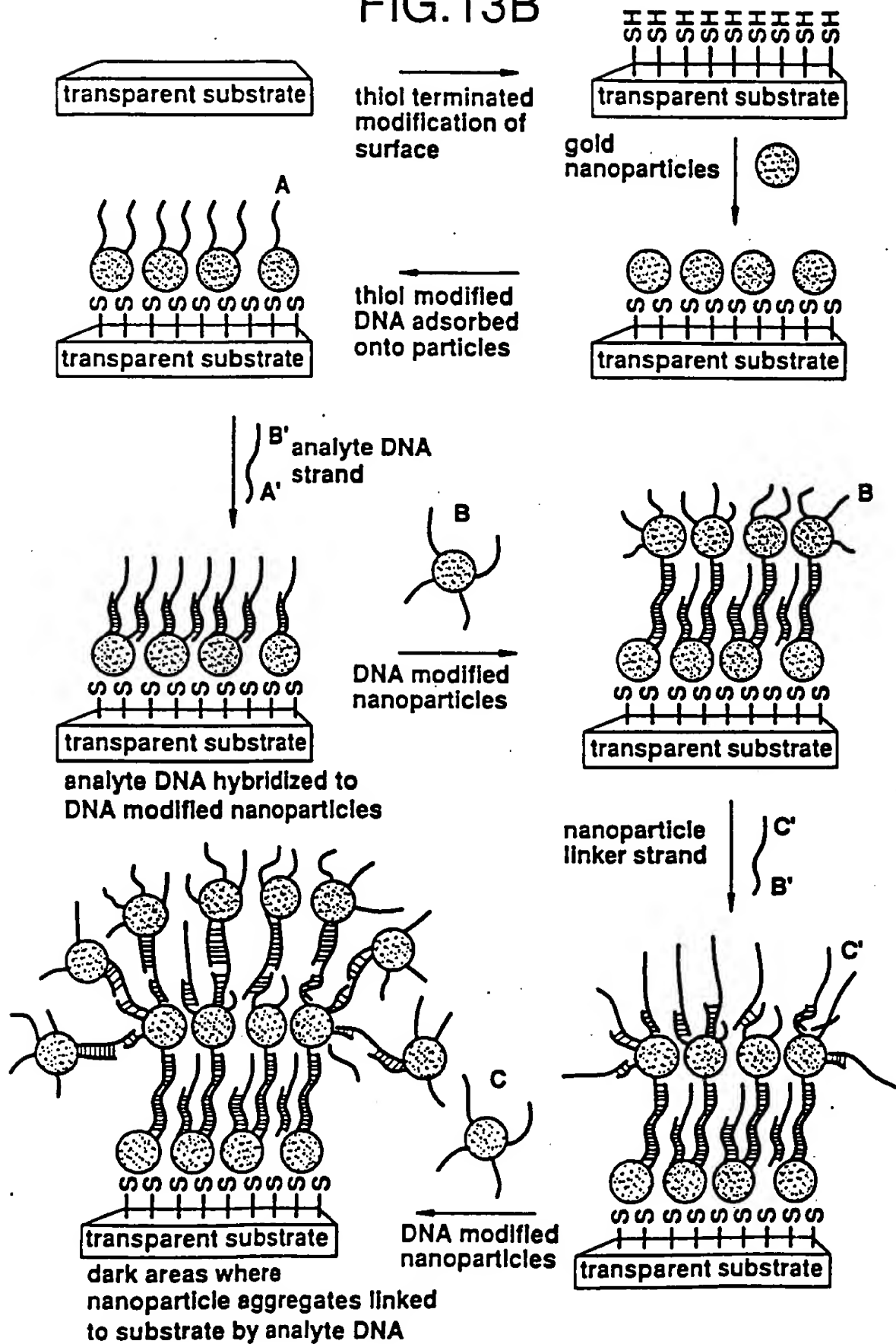


FIG. 13B

FIG.14A

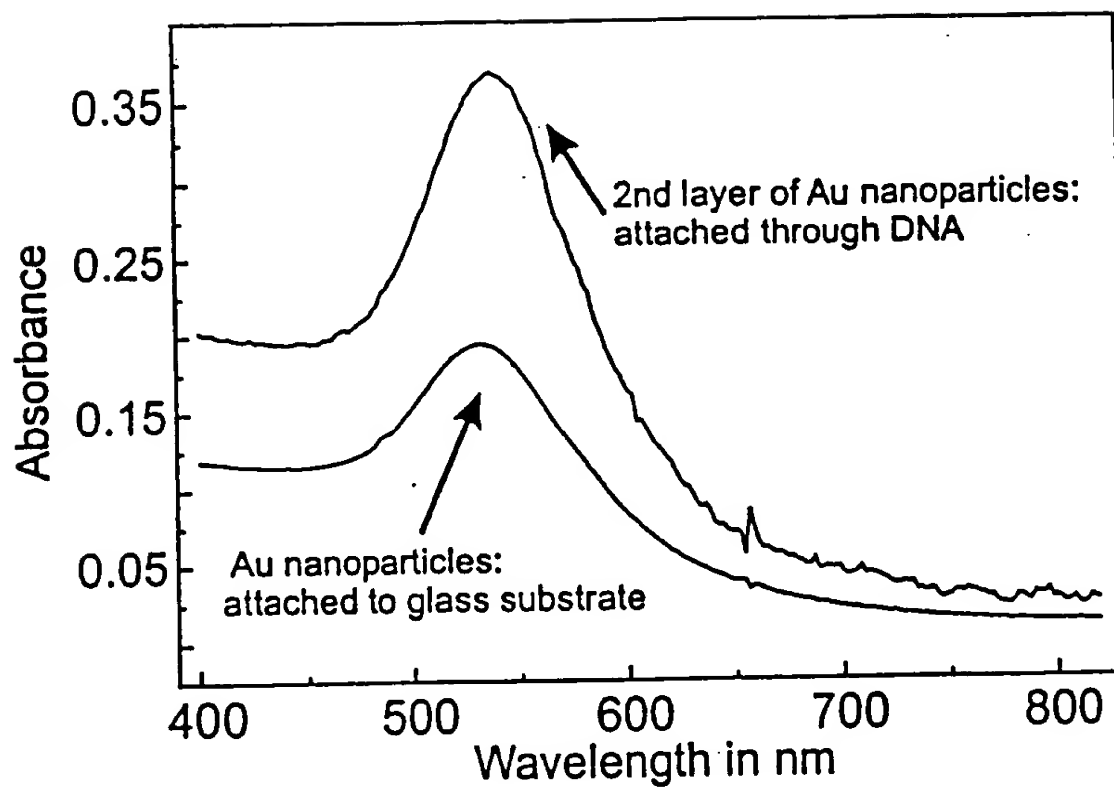


FIG.14B

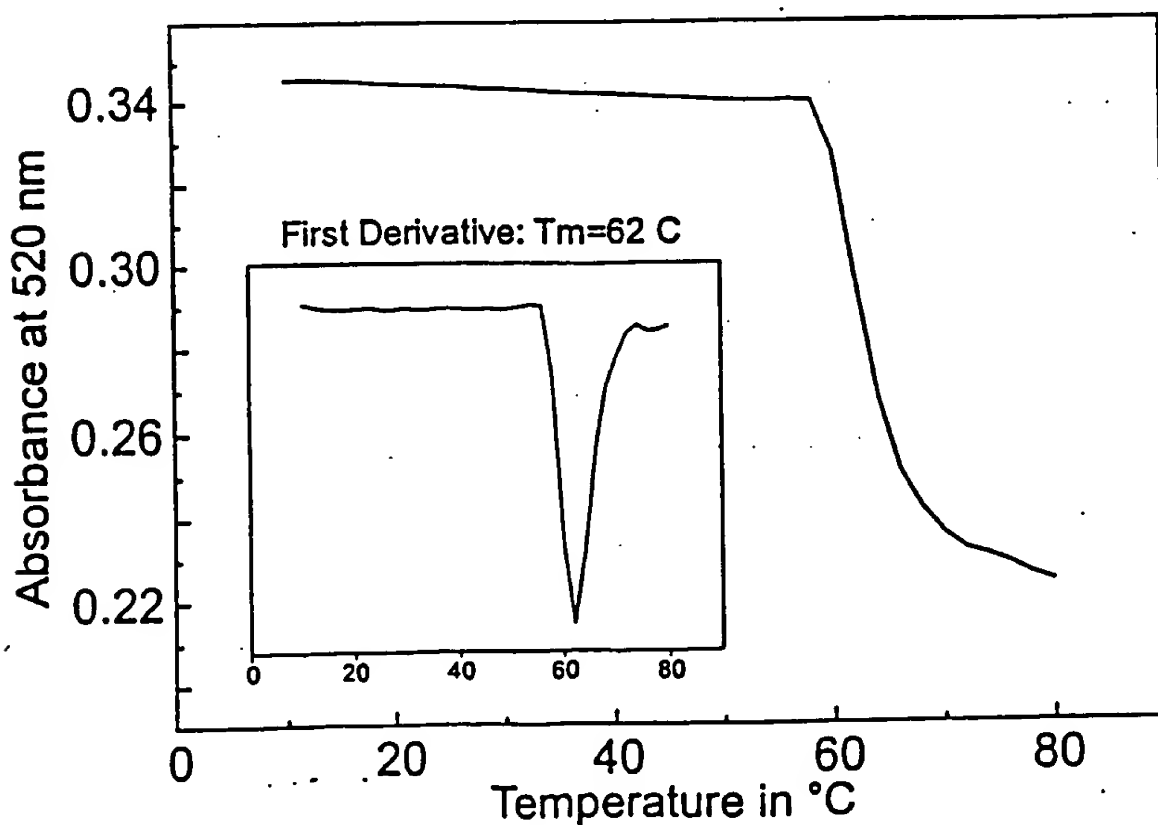


FIG15A

Probes with No Target

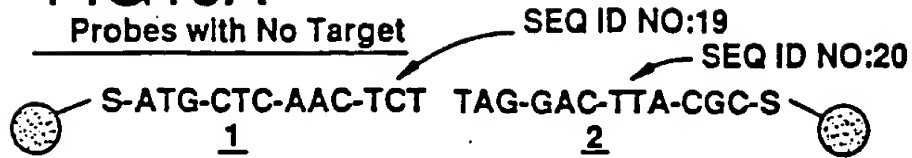


FIG15B

Half-Complementary Target

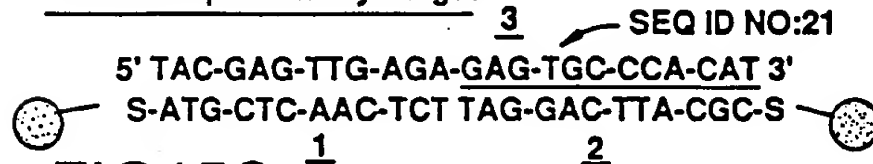


FIG15C

Complementary Target



FIG15D

ONE Base-Pair Mismatch at Probe Head

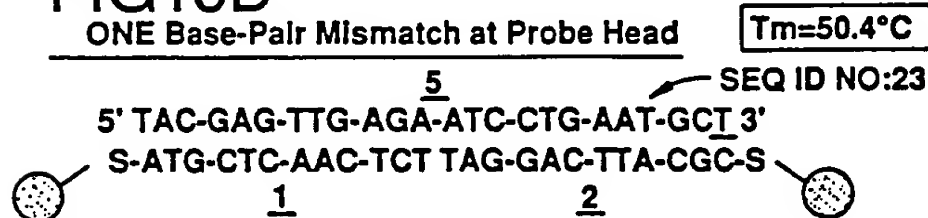


FIG15E

ONE Base-Pair Mismatch at Probe Tail

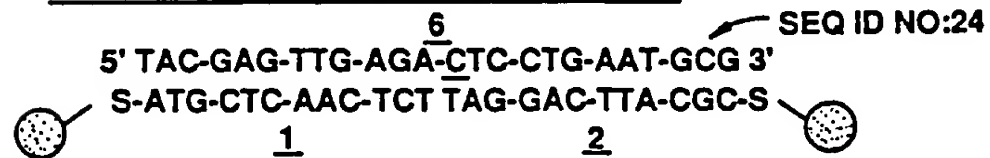


FIG15F

ONE Base Deletion

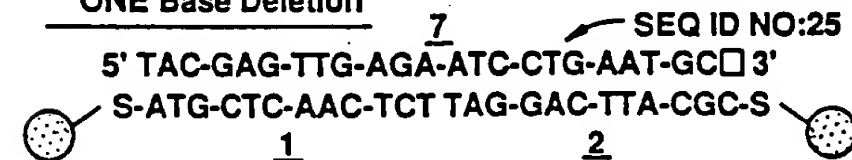


FIG15G

ONE Base-Pair Insertion

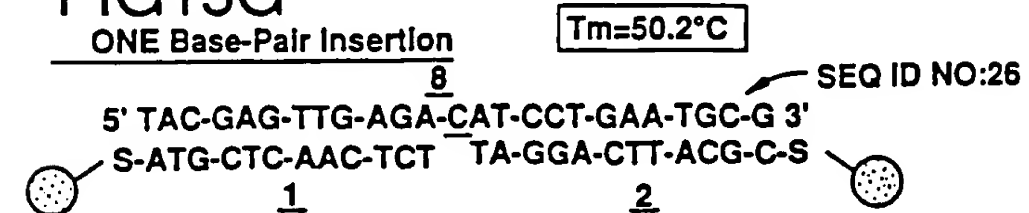


FIG.16A

24 Base Template

5' TAC-GAG-TTG-AGA-ATC-CTG-AAT-GCG 3'
 —S-ATG-CTC-AAC-TCT TAG-GAC-TTA-CGC-S —
 1 2

FIG.16B

48 Base Template with Complementary 24 Base Filler

5' TAC-GAG-TTG-AGA-CCG-TTA-AGA-CGA-GGC-AAT-CAT-GCA-ATC-CTG-AAT-GCG 3'
 —S-ATG-CTC-AAC-TCT GGC-AAT-TCT-GCT-CCG-TTA-GTA-CGT TAG-GAC-TTA-CGC-S —
 1 2

FIG.16C

72 Base Template with Complementary 48 Base Filler

5' TAC-GAG-TTG-AGA-CCG-TTA-AGA-CGA-GGC-AAT-CAT-GCA-TAT-ATT-GGA-CGC-TTT-ACG-GAC-AAC-ATC-CTG-AAT-GCG 3'
 —S-ATG-CTC-AAC-TCT GGC-AAT-TCT-GCT-CCG-TTA-GTA-CGT-ATA-TAA-CCT-GCG-AAA-TGC-CTG-TTG TAG-GAC-TTA-CGC-S —
 1 2

FIG.17A

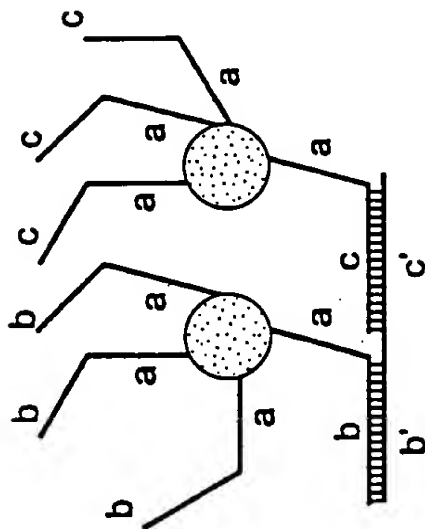


FIG.17B

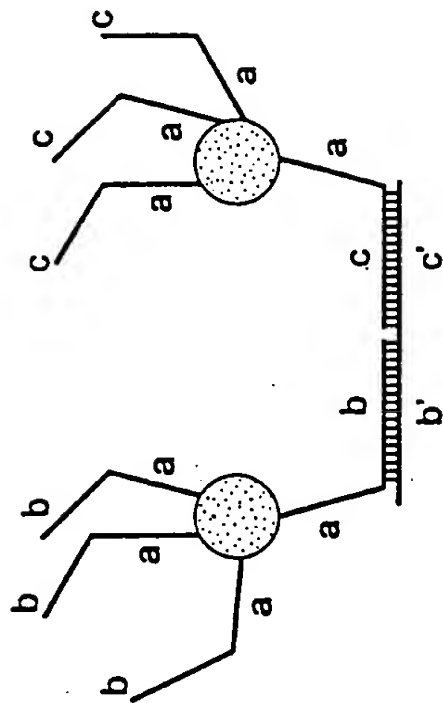


FIG.17C

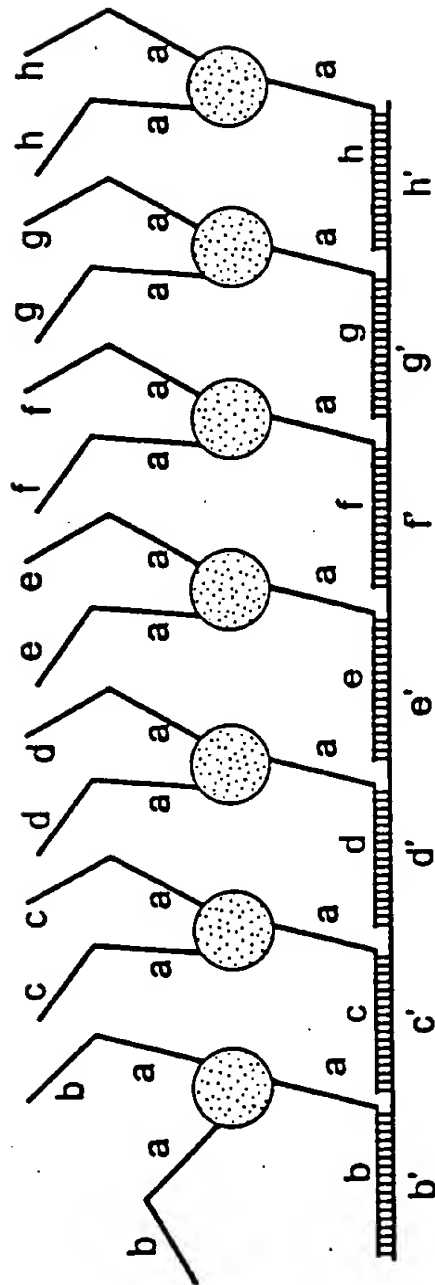


FIG.17D

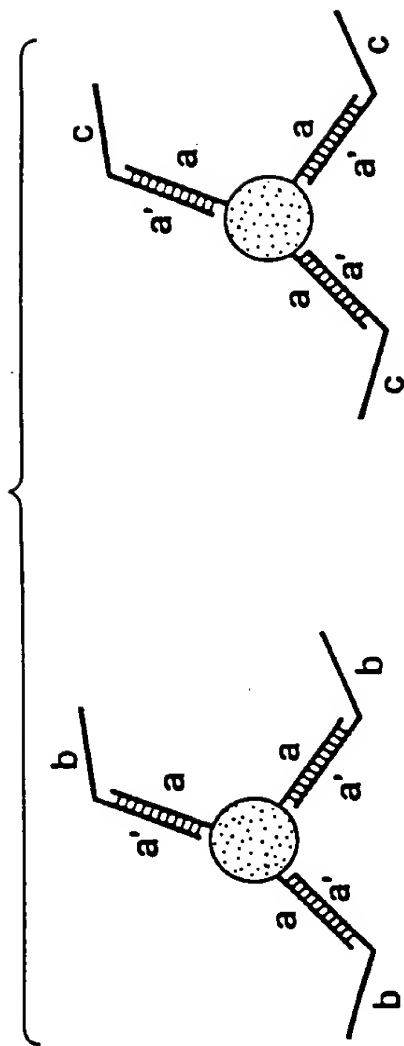


FIG.17E

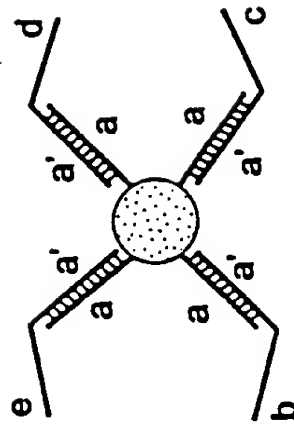


FIG.18

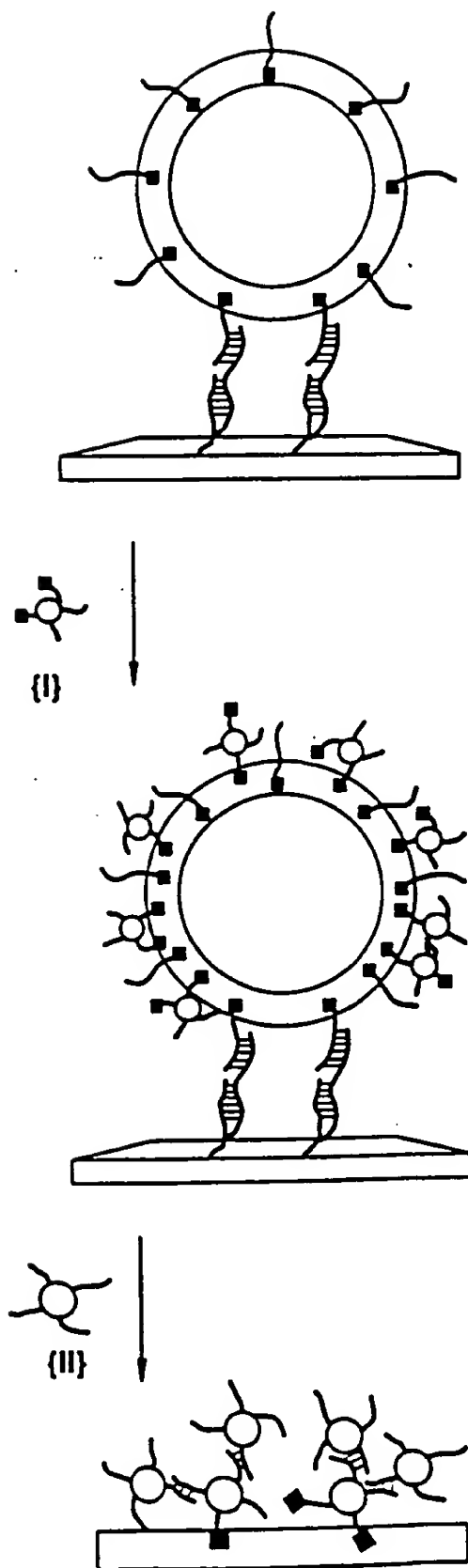


FIG.19A

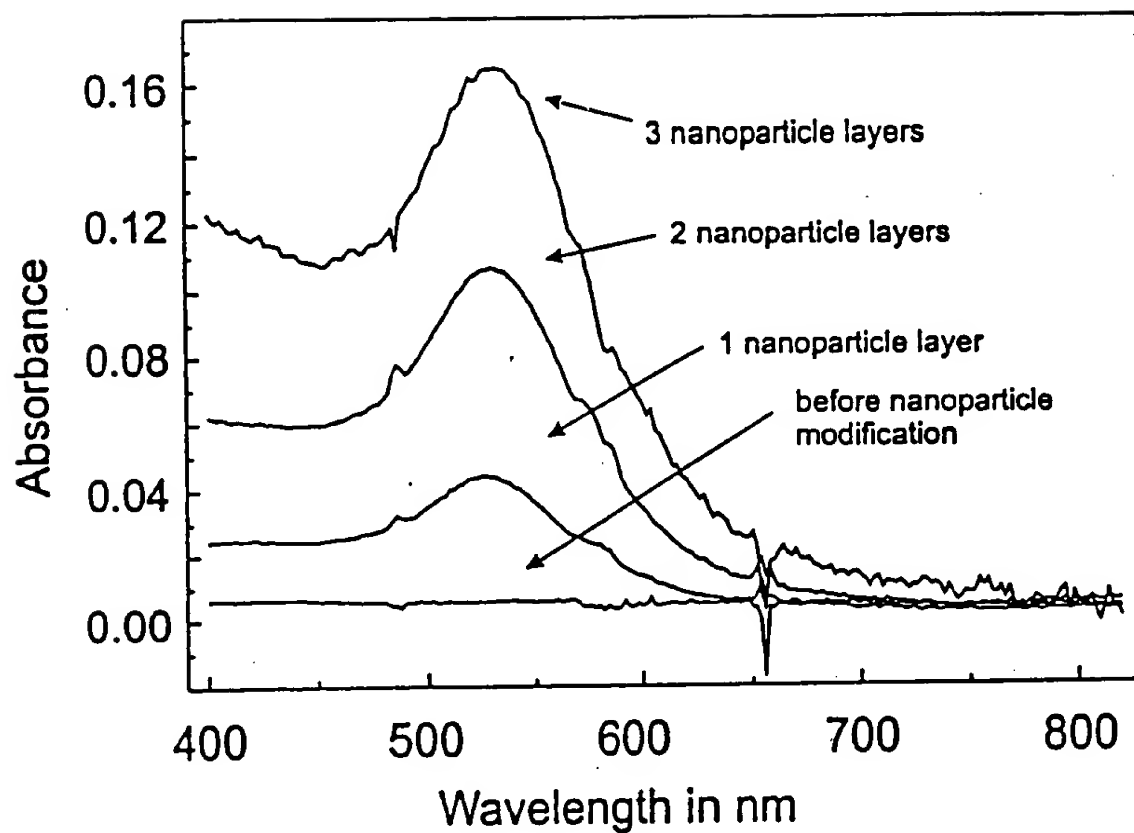
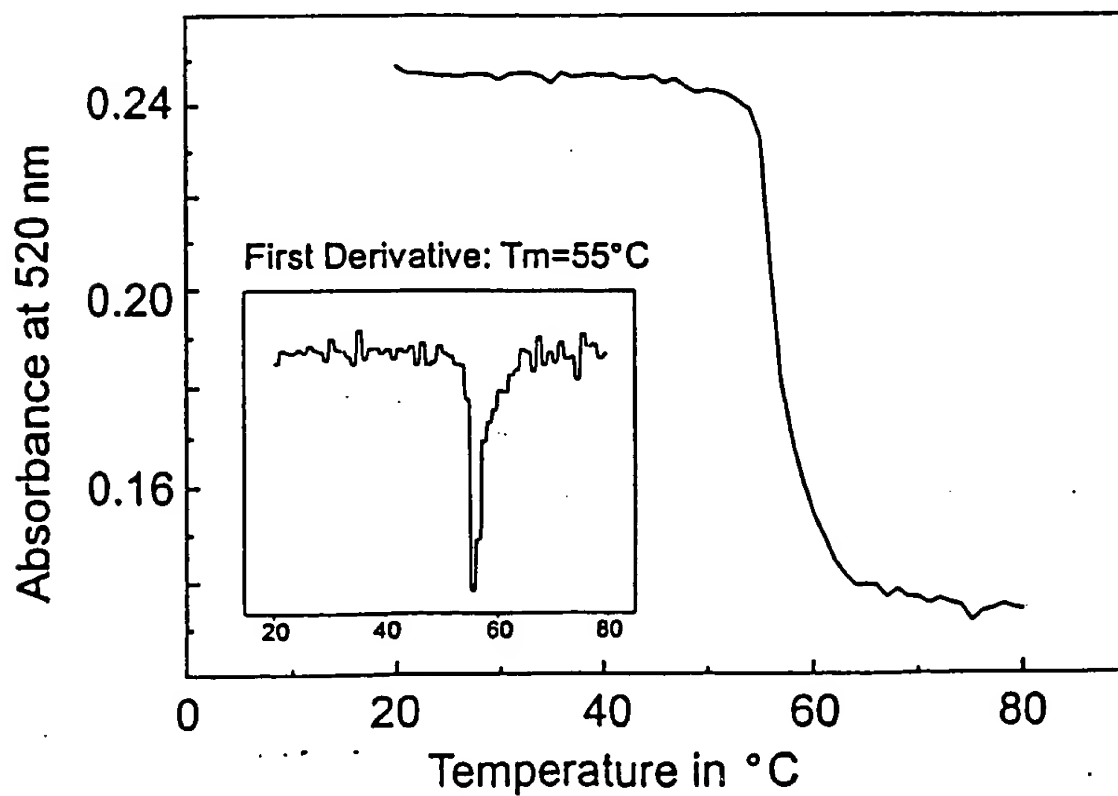
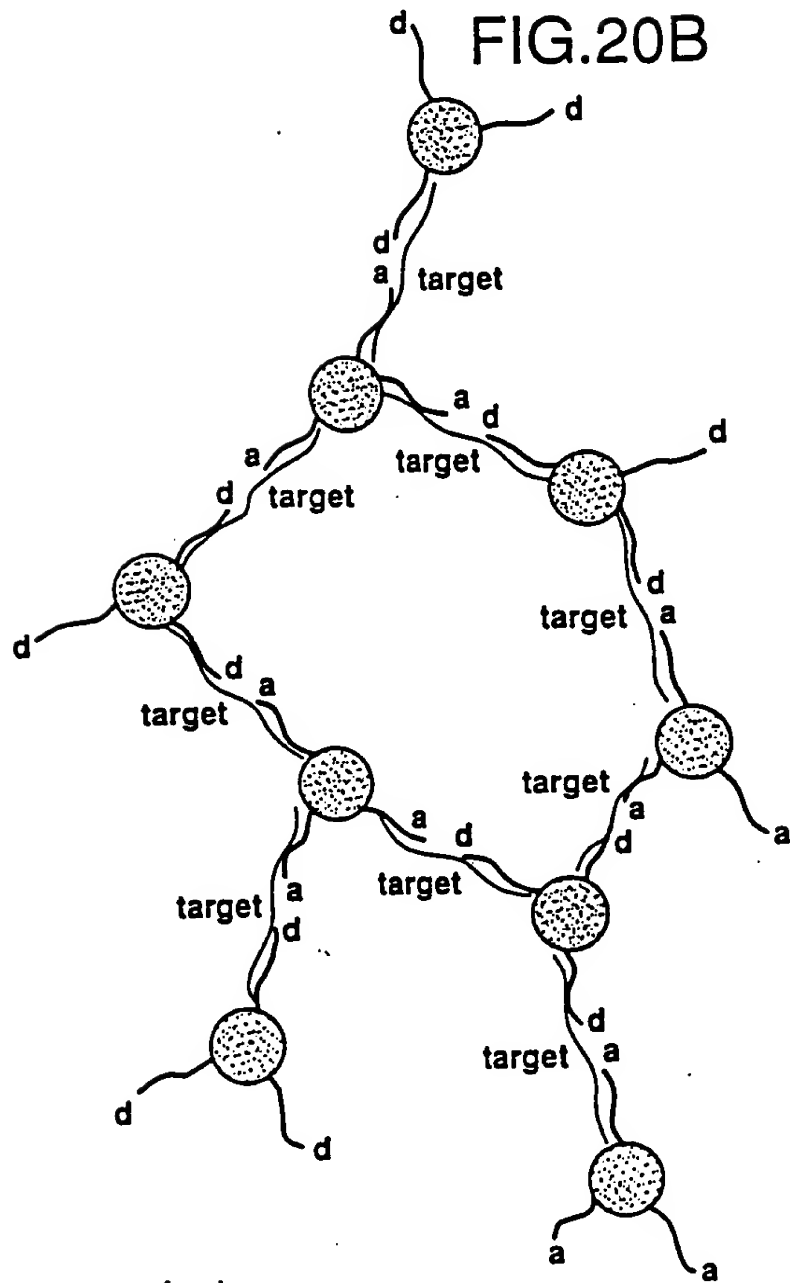
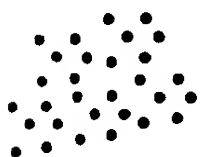


FIG.19B



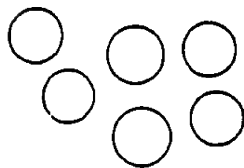


Oligonucleotide
modified Au
nanoparticle probes



Red

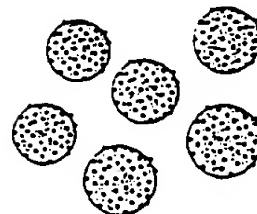
Fluorophore labeled
oligonucleotide modified
latex probes



White/Fluorescent

Target
Oligonucleotide

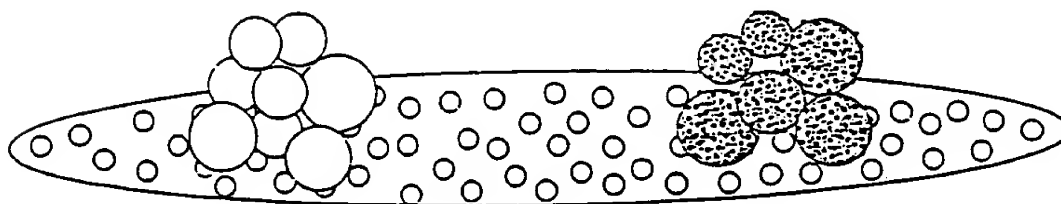
Au/Latex hybrid



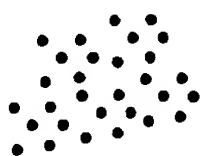
Pink/Non-fluorescent

No Target
Oligonucleotide

Target
Oligonucleotide



All Au probes pass
through membrane

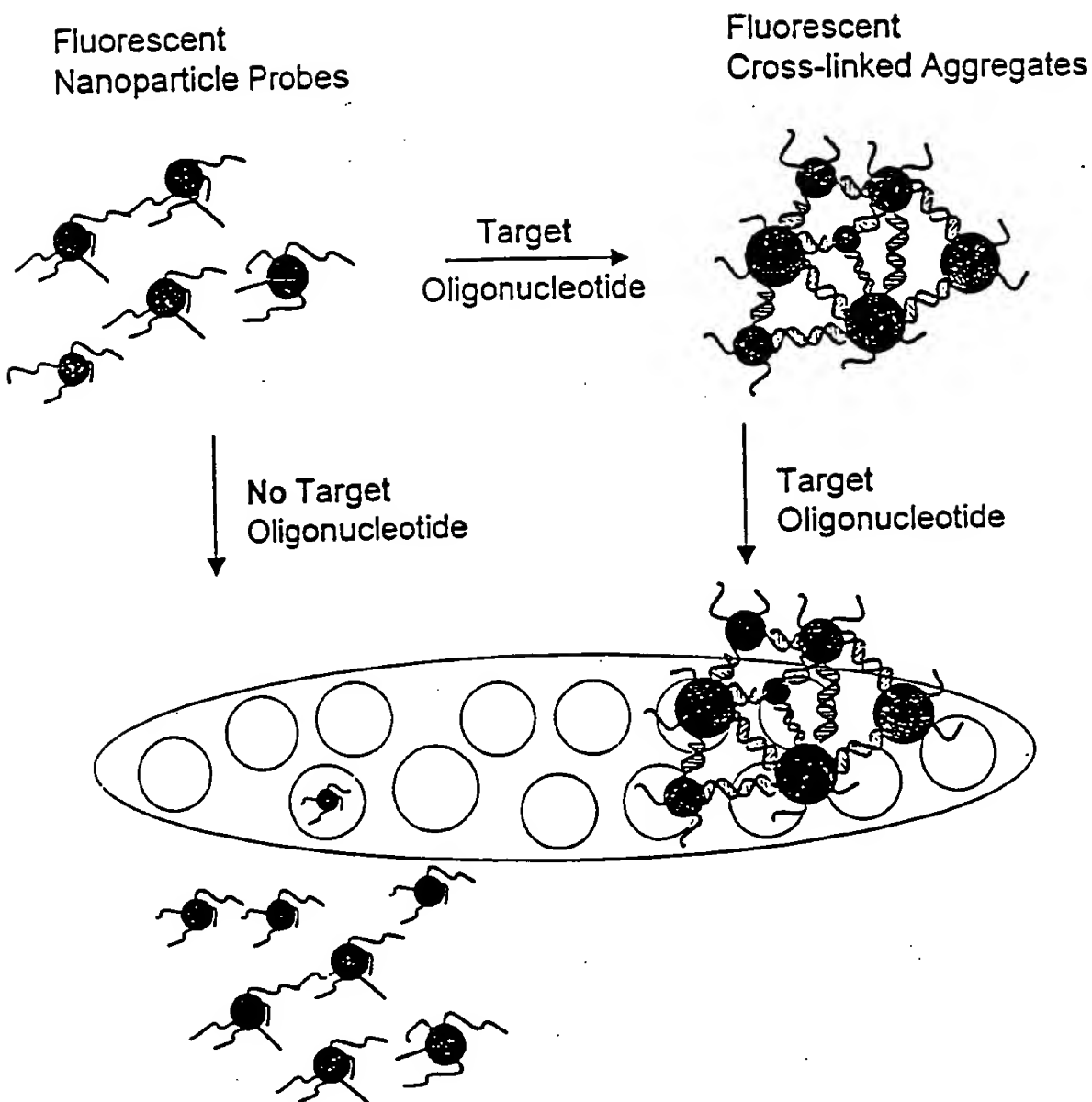


Excess Au probes
pass through
membrane



FIGURE 21

FIGURE 22



The fluorescent nanoparticle probes pass through the membrane

The fluorescent cross-linked aggregates are retained by the membrane

[illegible]

ATA TTA TCC AGG GTT ATA TTG TAG AAA TTG AAG ATA CTG AAG GGC TT 3'
TAT AAT AGG TCC CAA TAT AAC ATC TTT AAC TTC TAT GAC TTC CCG AA 5'

141 mer Anthrax PCR product [SEQ ID NO:36]



3' C CGC CTA CTC AGT CAT CAA TTC CTC CGA GT	[SEQ	ID	NO: 39]
3' A TCT CTT CAT TAA TTA AGC AGT TGT	[SEQ	ID	NO: 40]
3' TAT TCT TTT TAT AAT AGG TCC CAA TAT	[SEQ	ID	NO: 41]
3' AAC ATC TTT AAC TTC TAT GAC TTC CCG AA	[SEQ	ID	NO: 42]

FIGURE 23

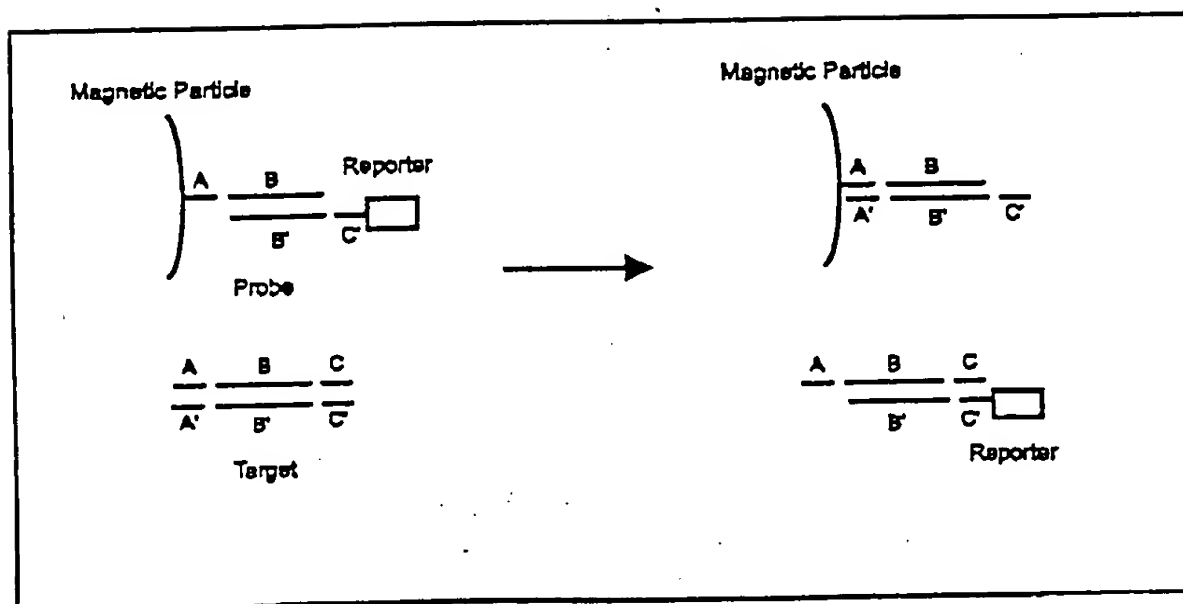
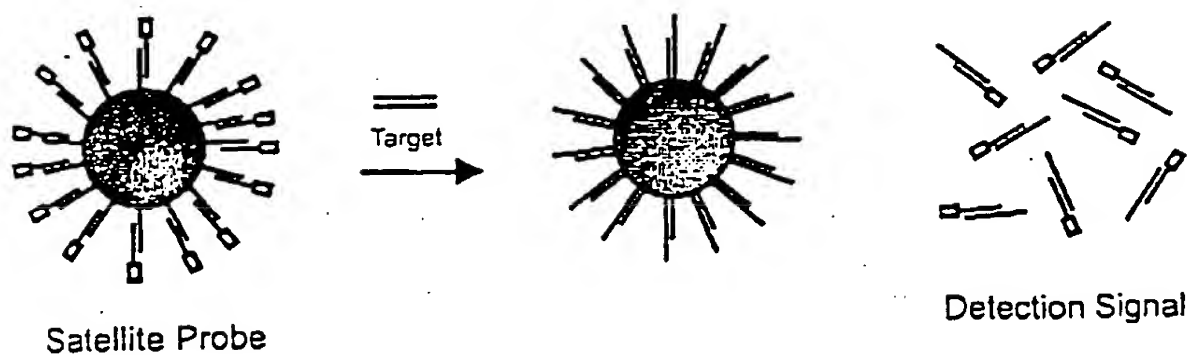


FIGURE 24

2.

FIGURE 25A

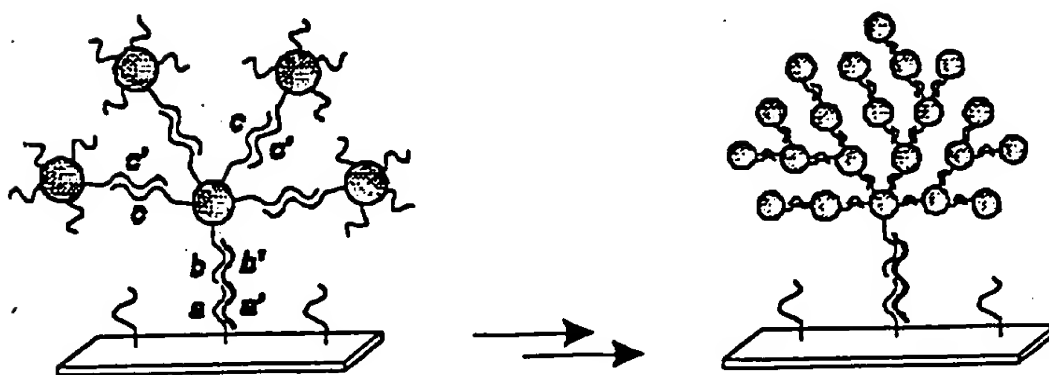
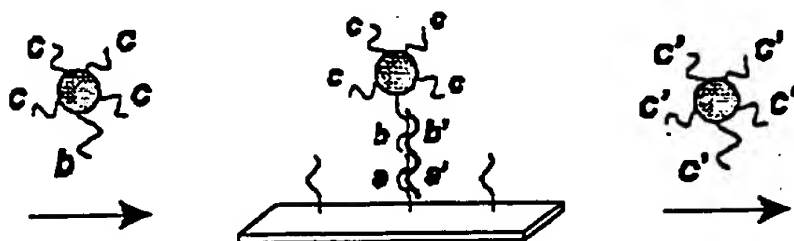
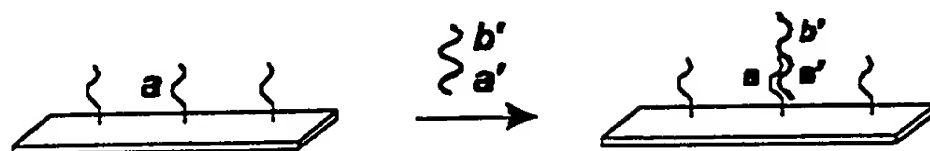
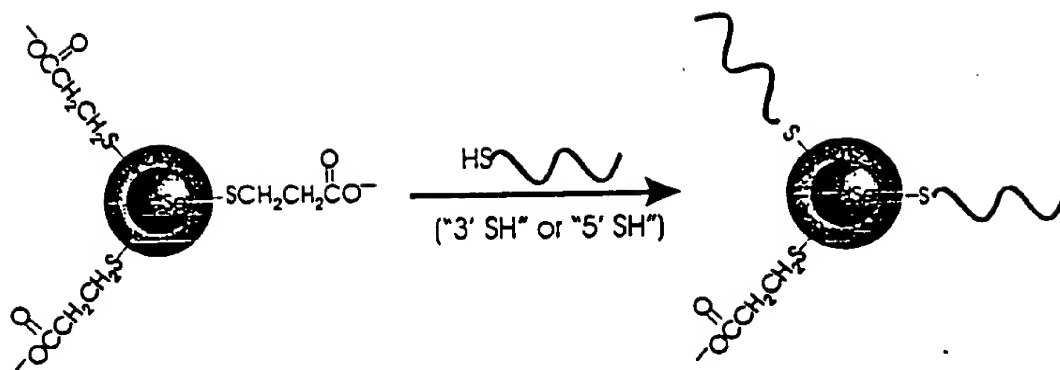


FIGURE 25 D

[illegible]

A



B

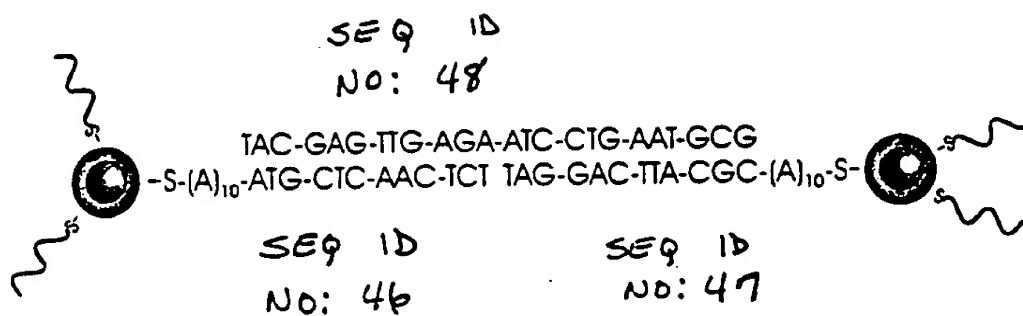


FIGURE 26

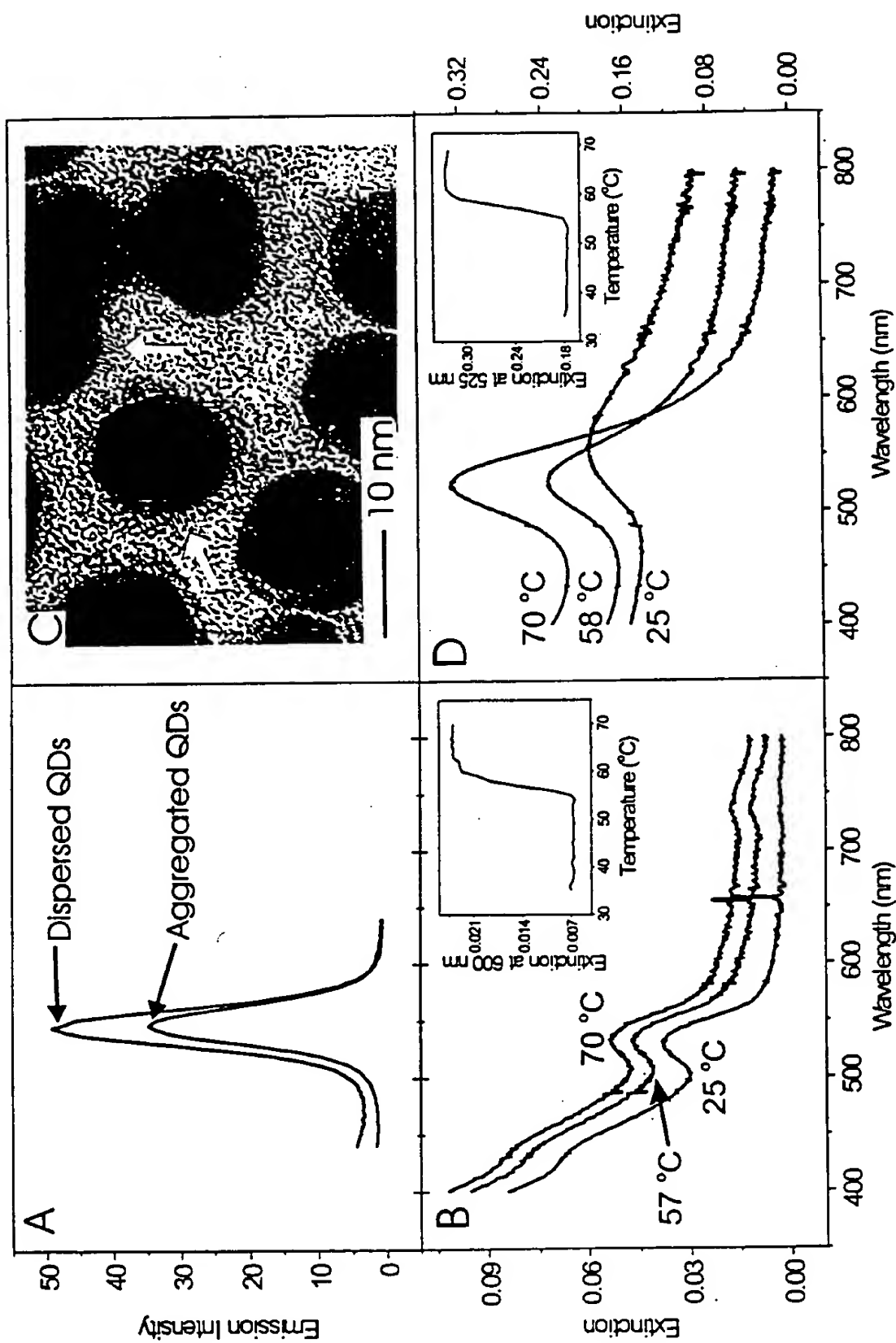


FIGURE 2

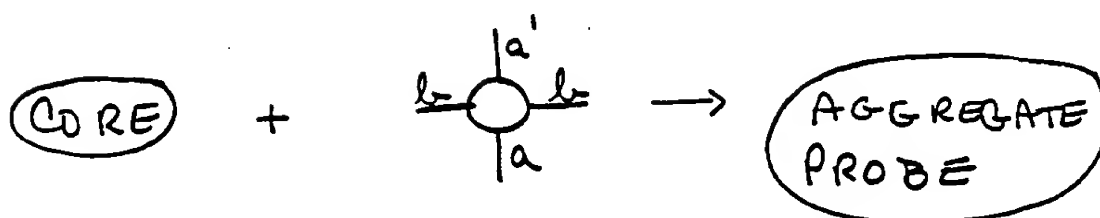
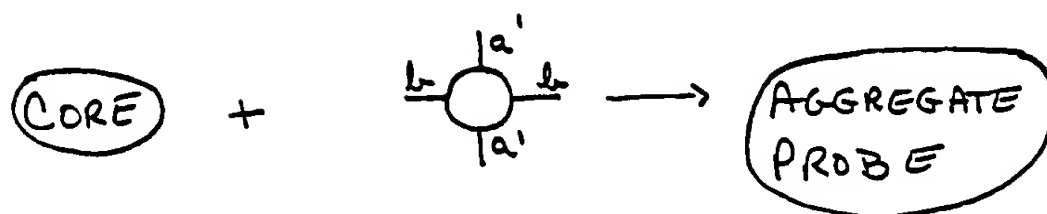
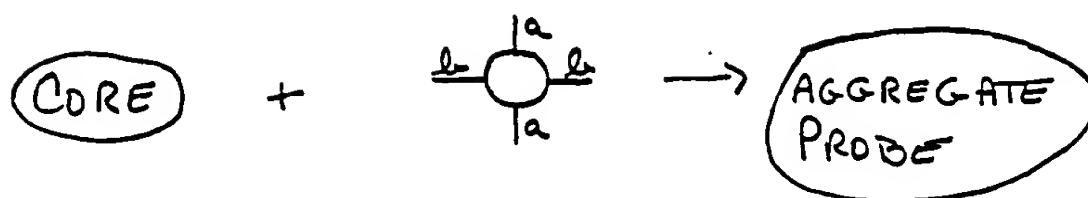
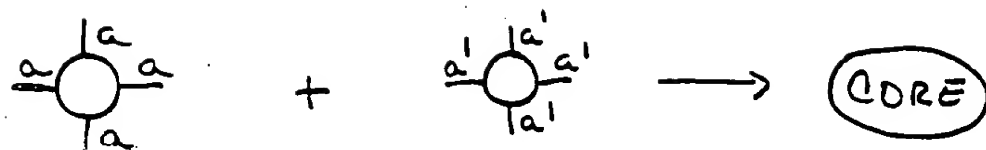
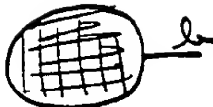


FIGURE 28A


 AGGREGATE
 PROBE

+ $\frac{b' \quad c'}{\text{TARGET}}$ + 

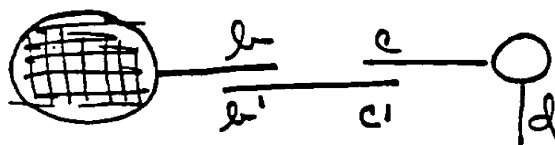
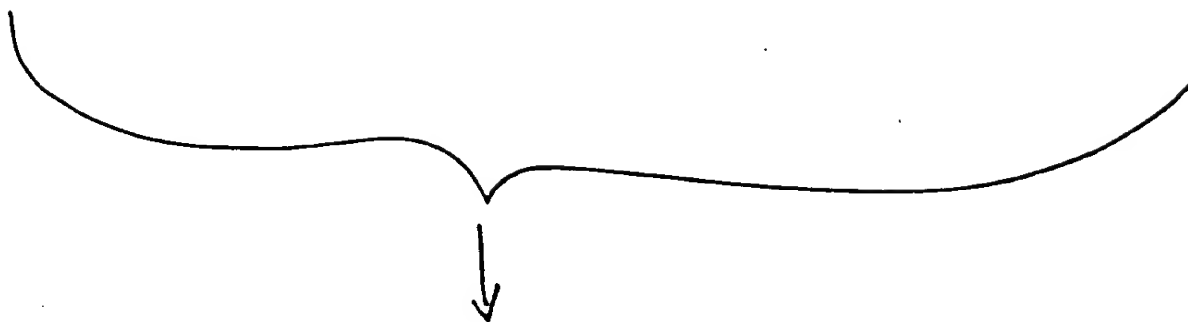
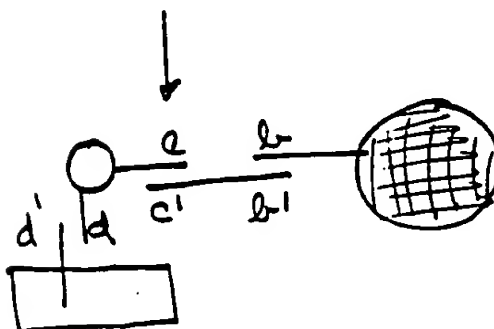
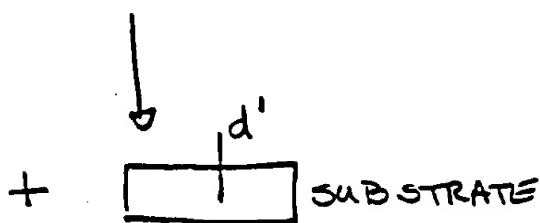


FIG. 28D

REMOVE EXCESS
 BY CENTRIFUGATION



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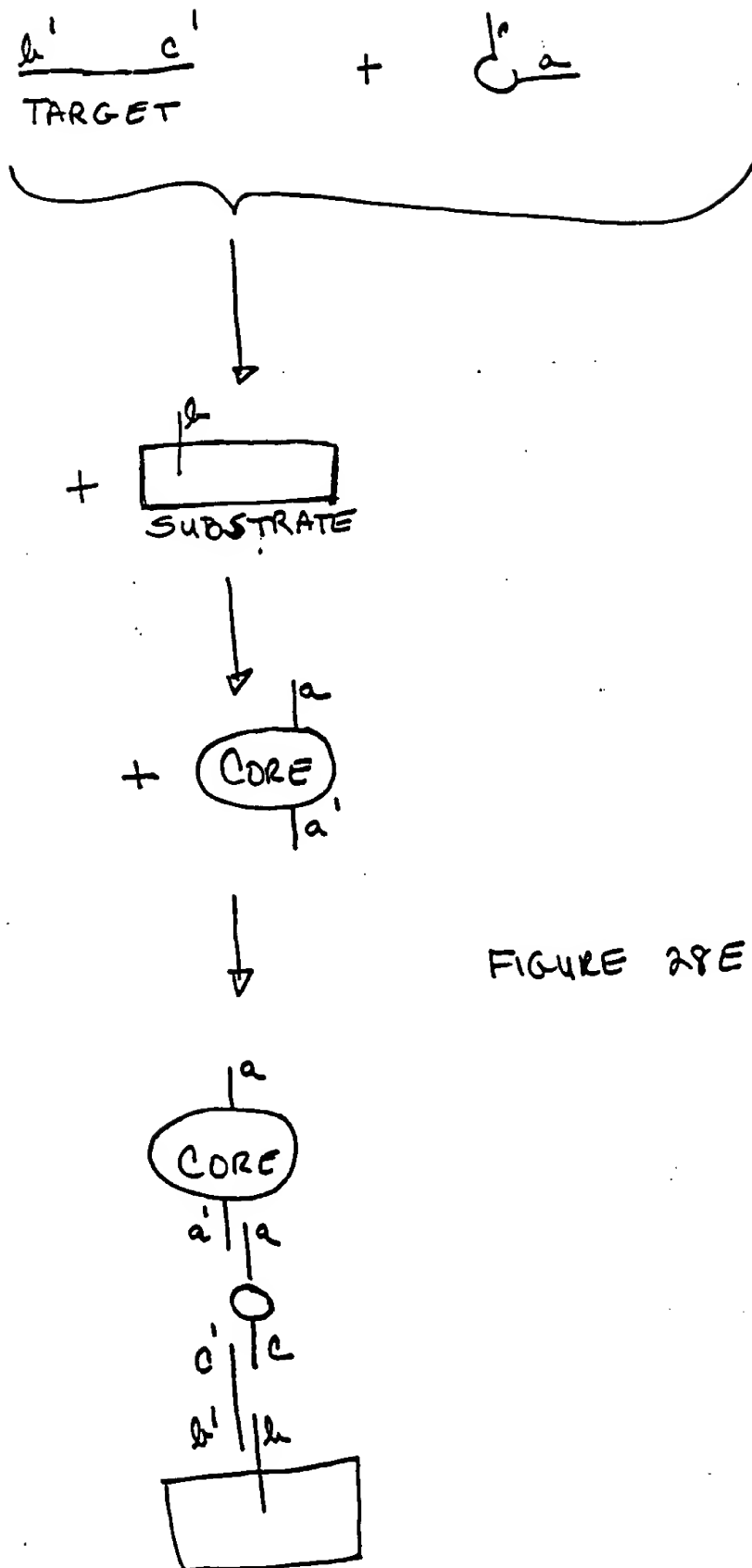


FIGURE 28E

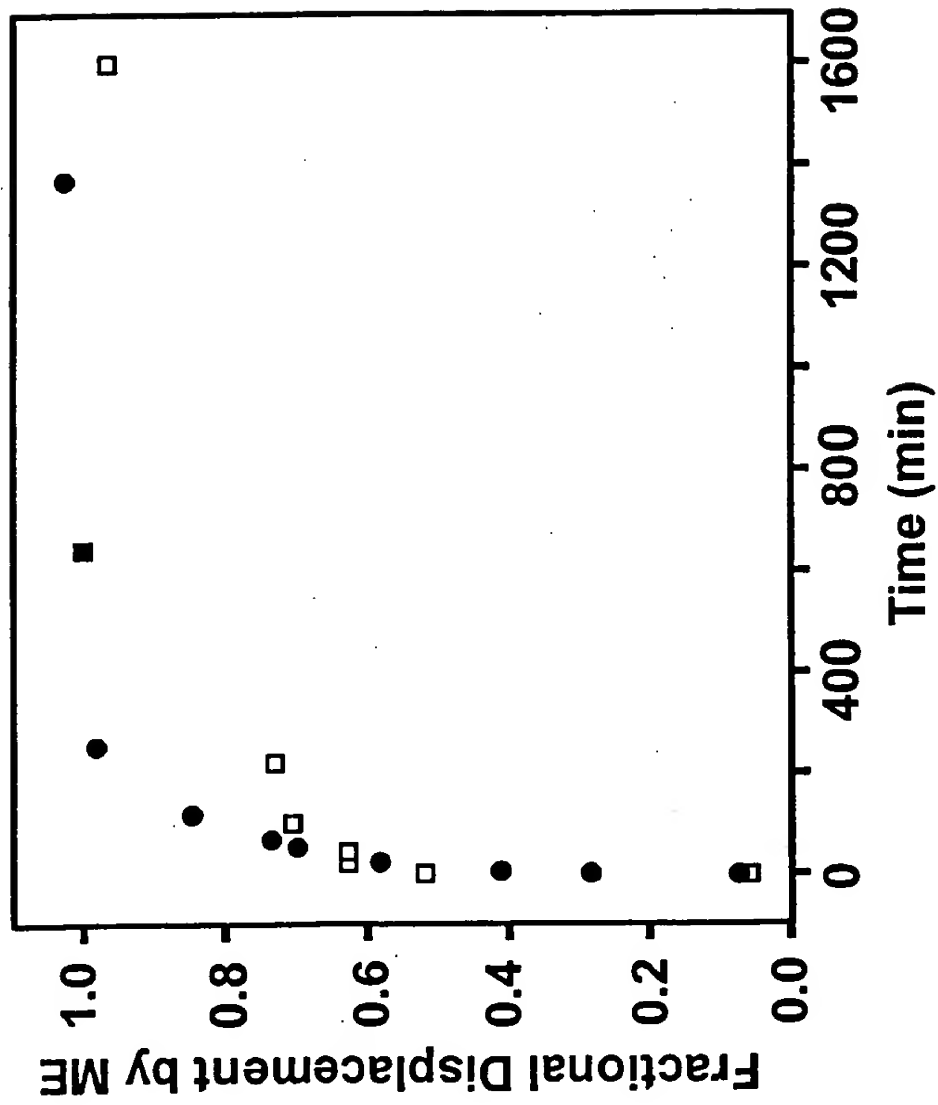


Figure 29

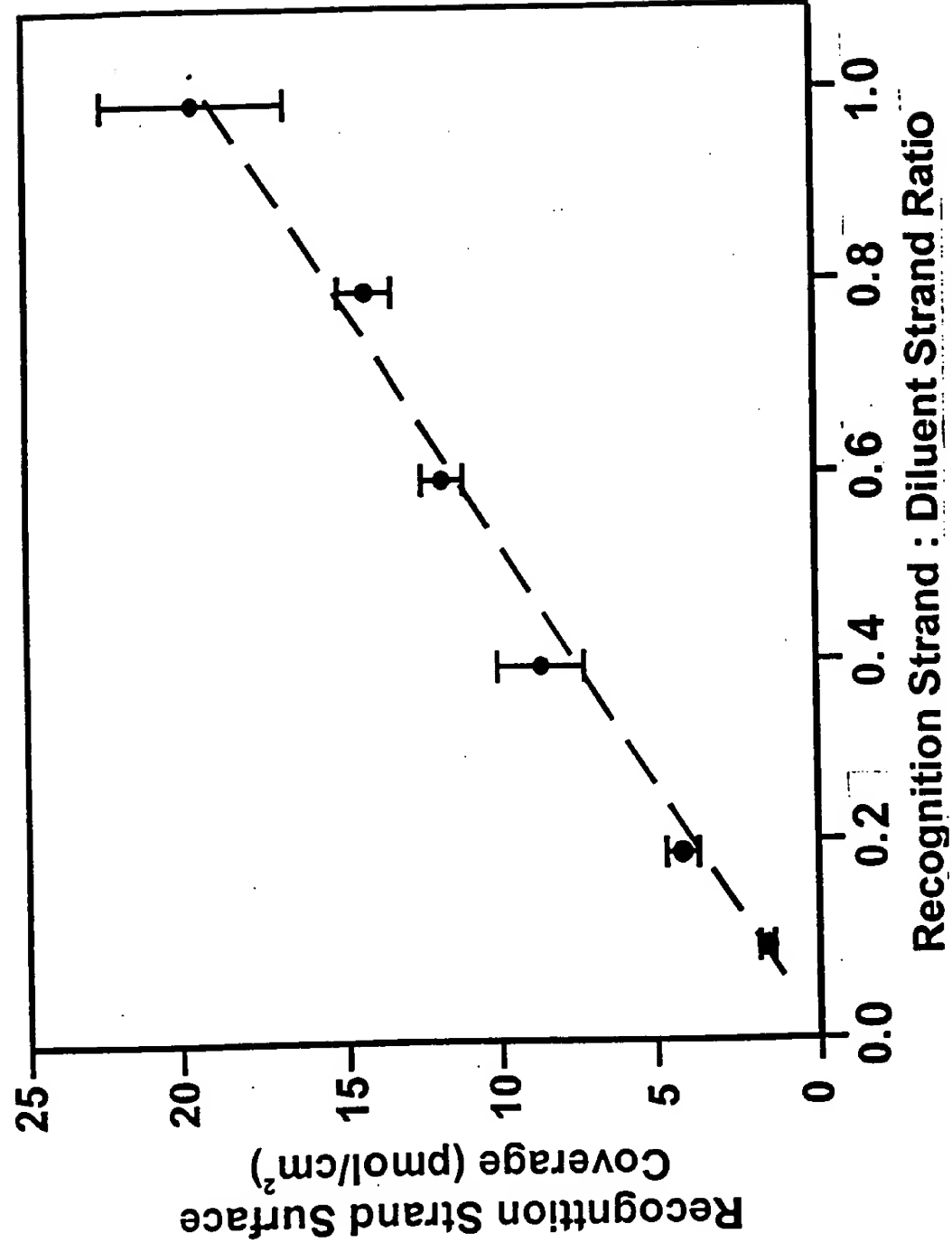


Figure 30

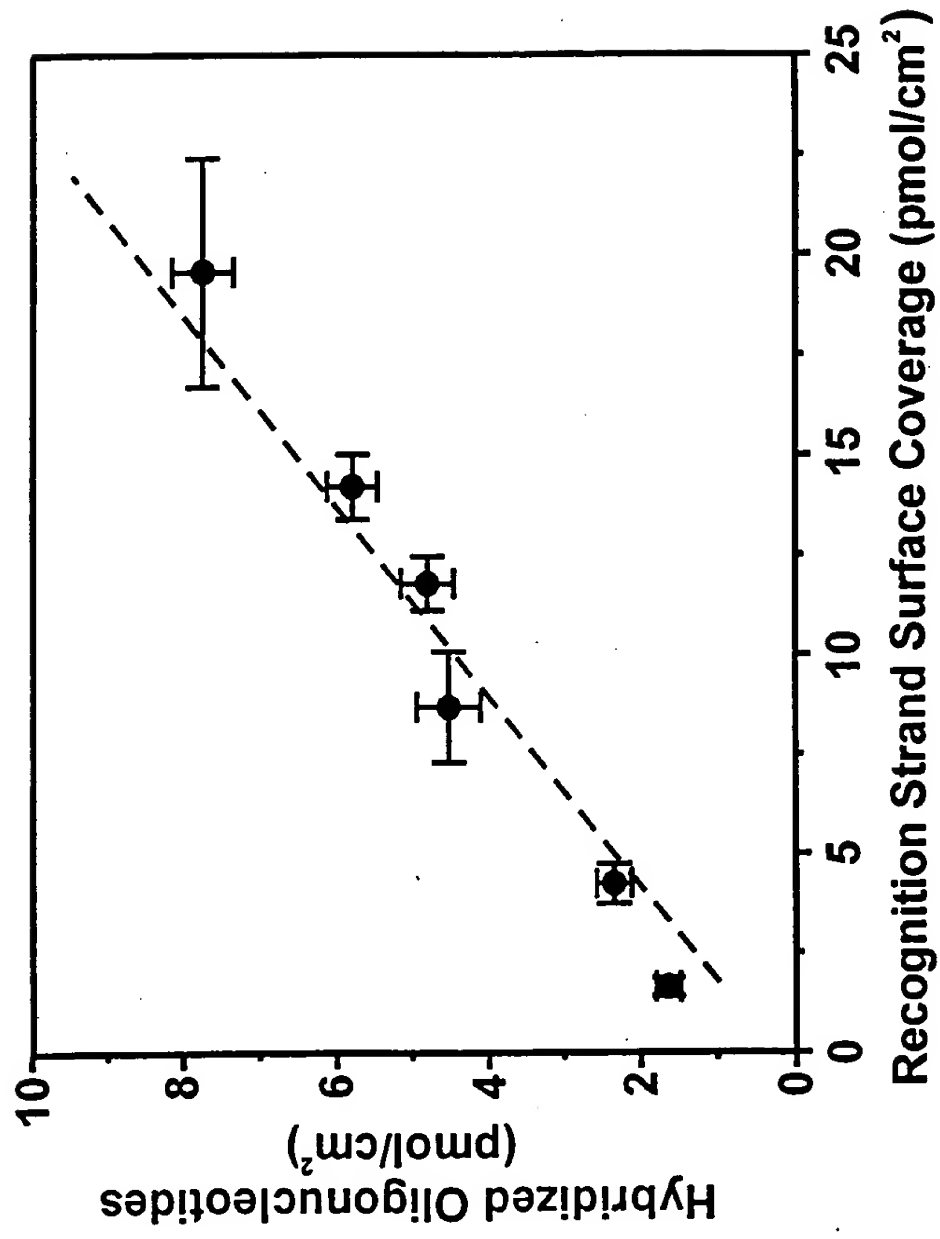


Figure 31

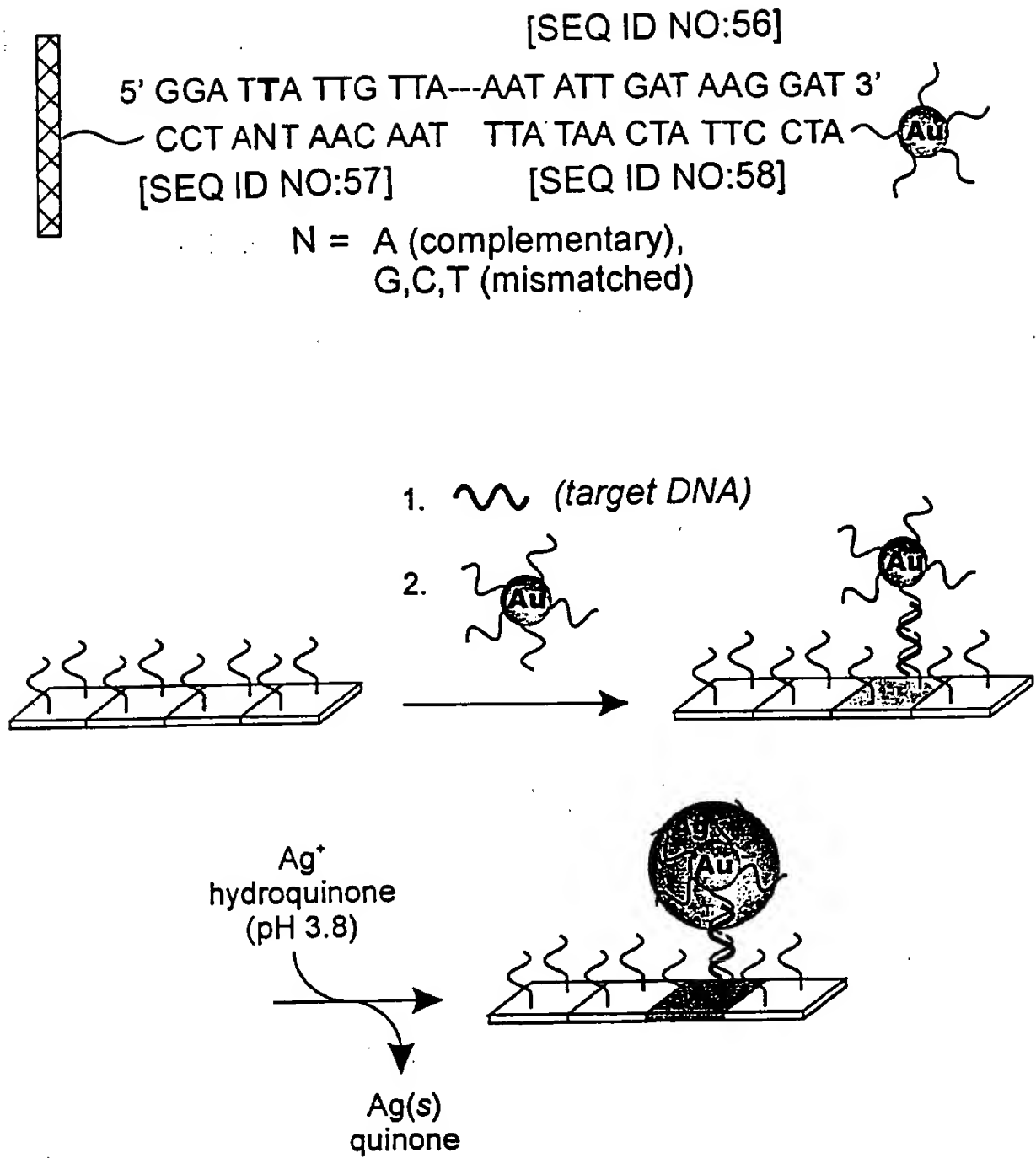


Figure 32

10

1000



1

1

Figure 33

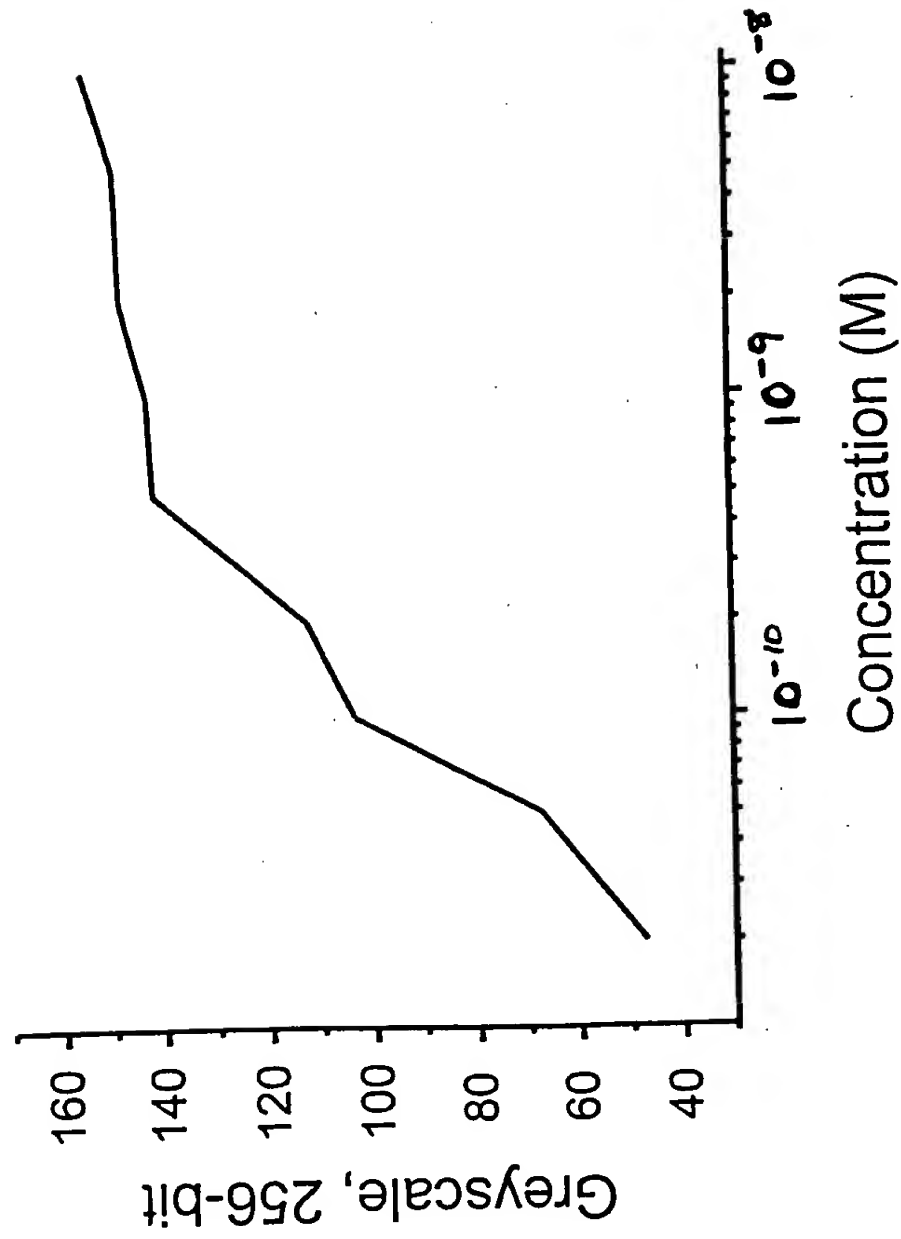


Figure 34

FOOT "00694660

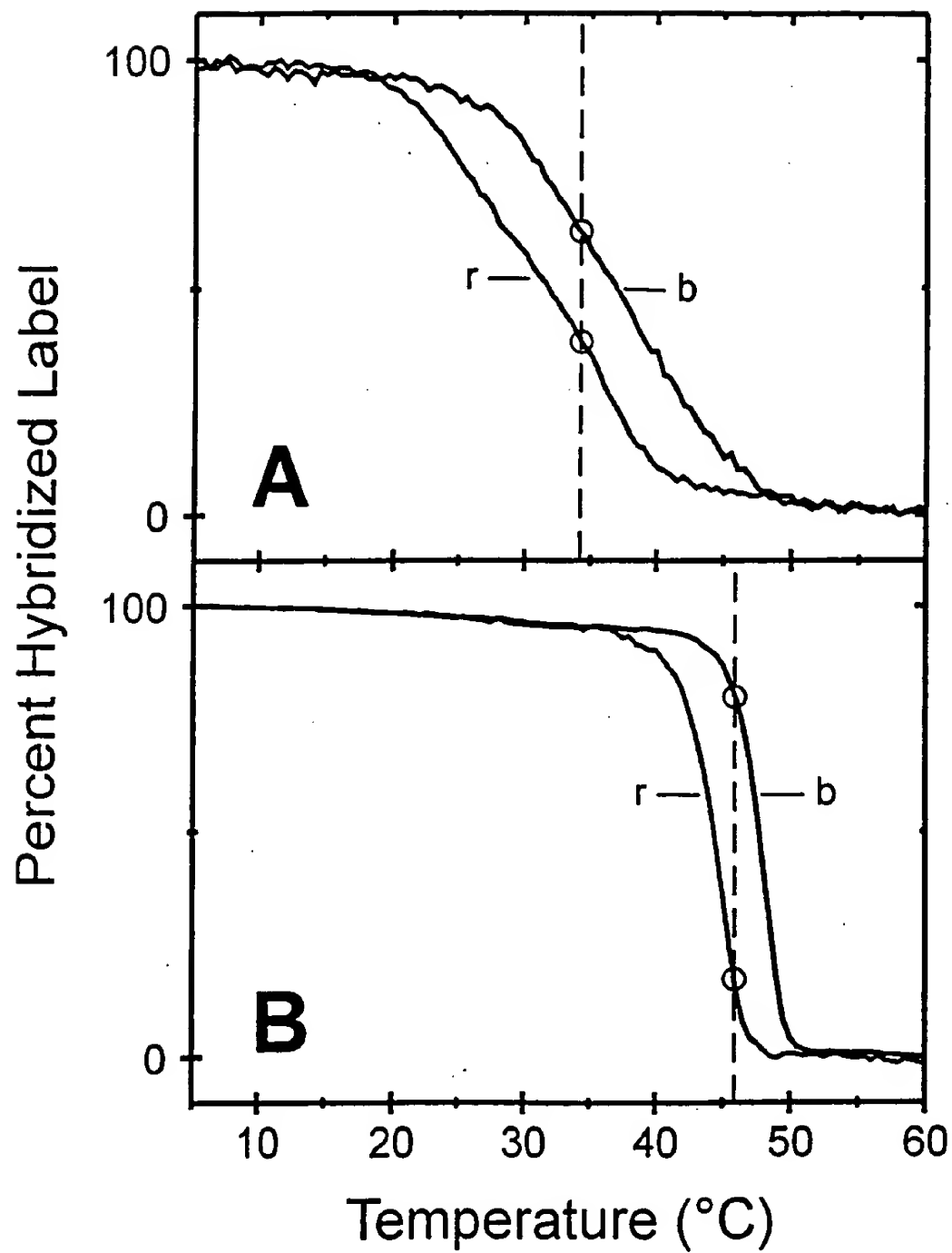


Figure 35

09976900-101201

FIG. 36A

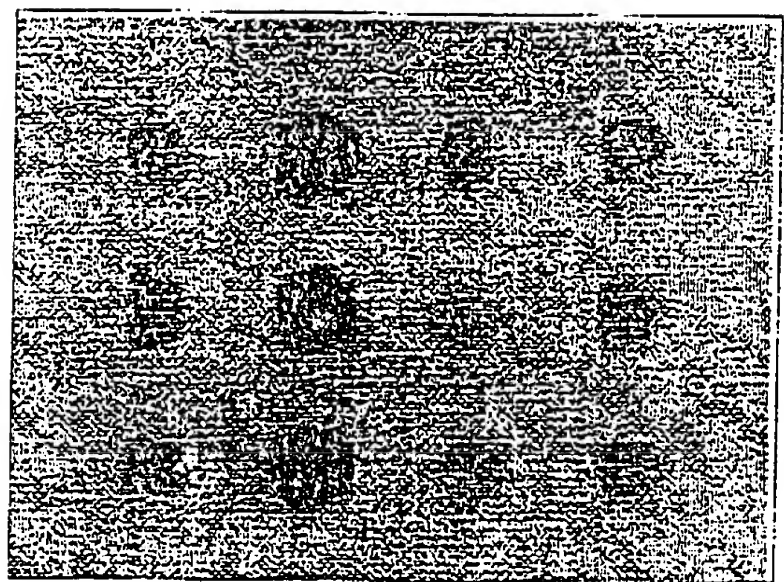
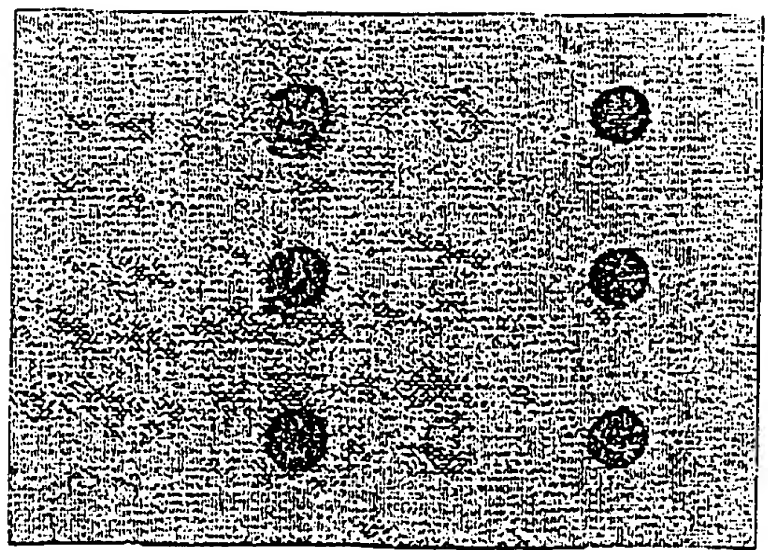


FIG. 36B



C A T G

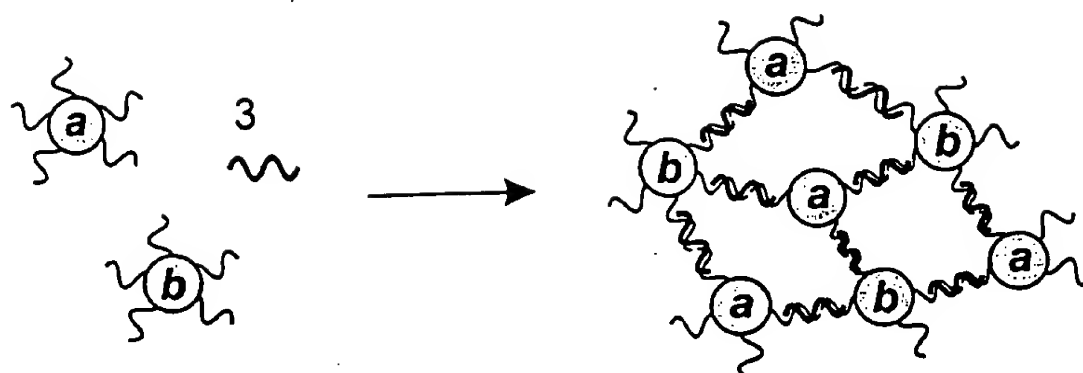
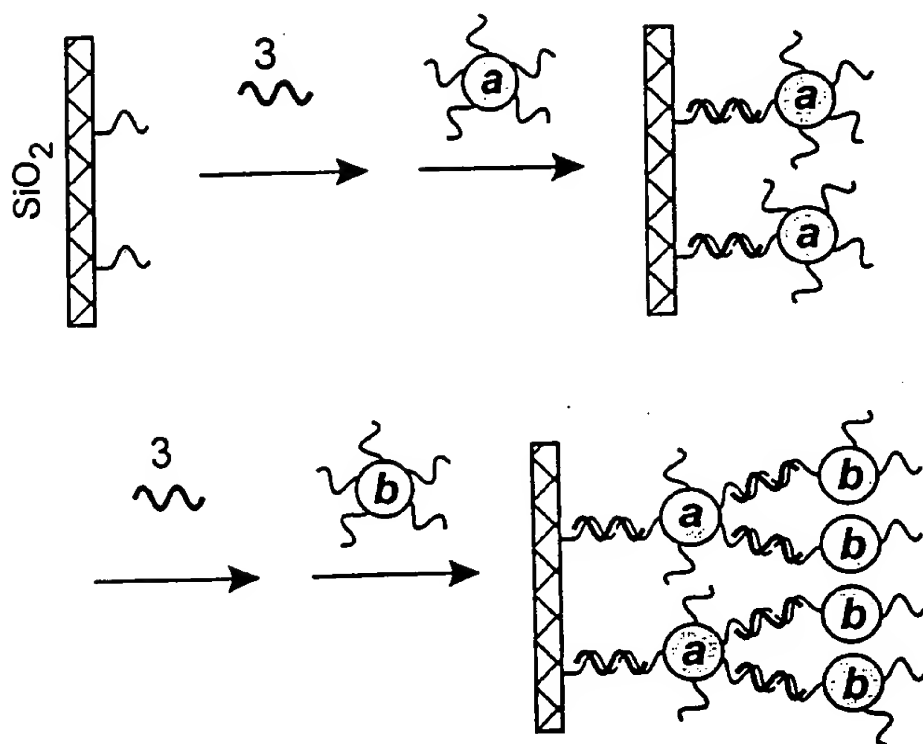
A**B**

Figure 37

10.1016/j.jlcr.2013.06.003

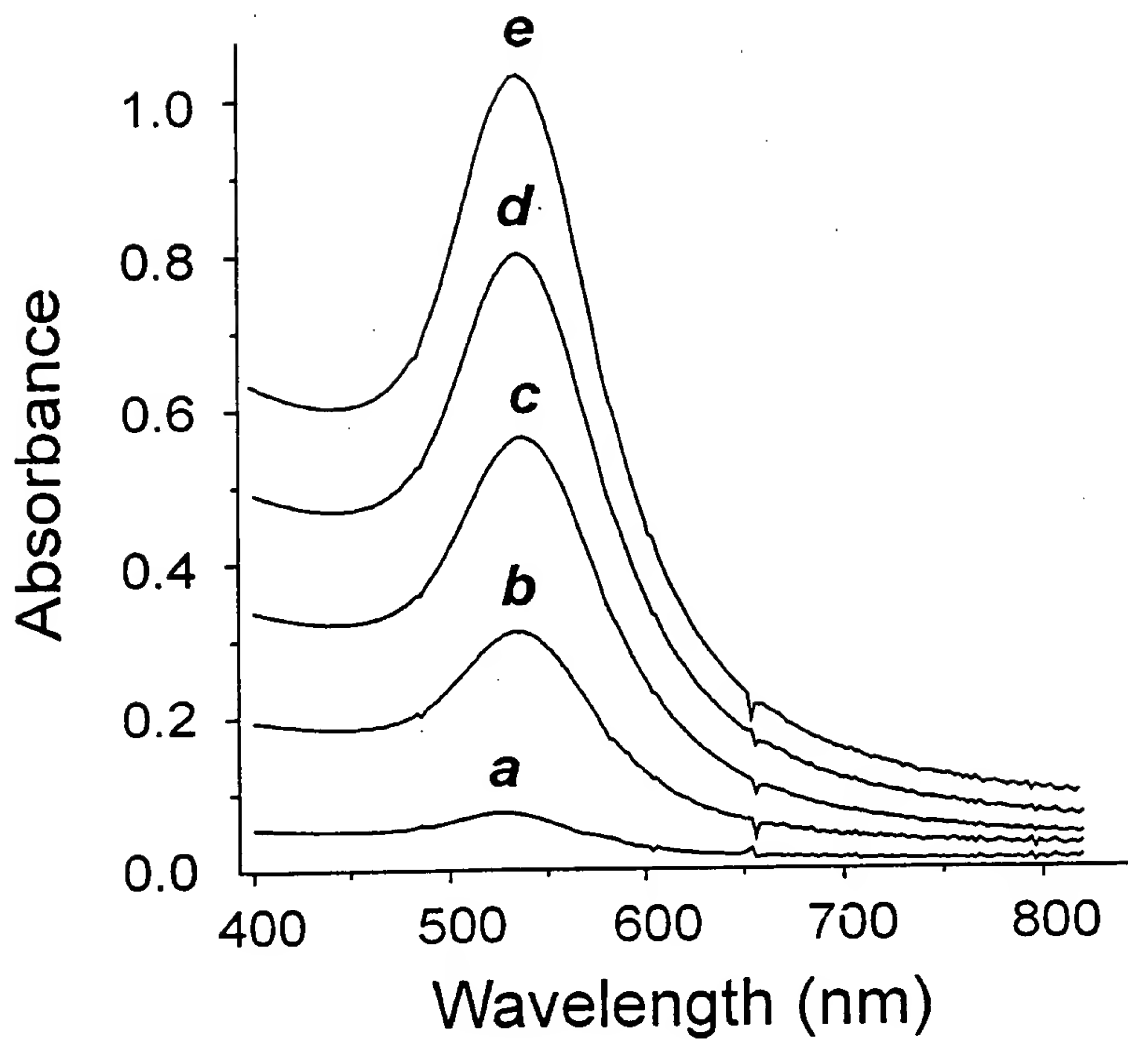


Figure 38A

FOOT" 00692660

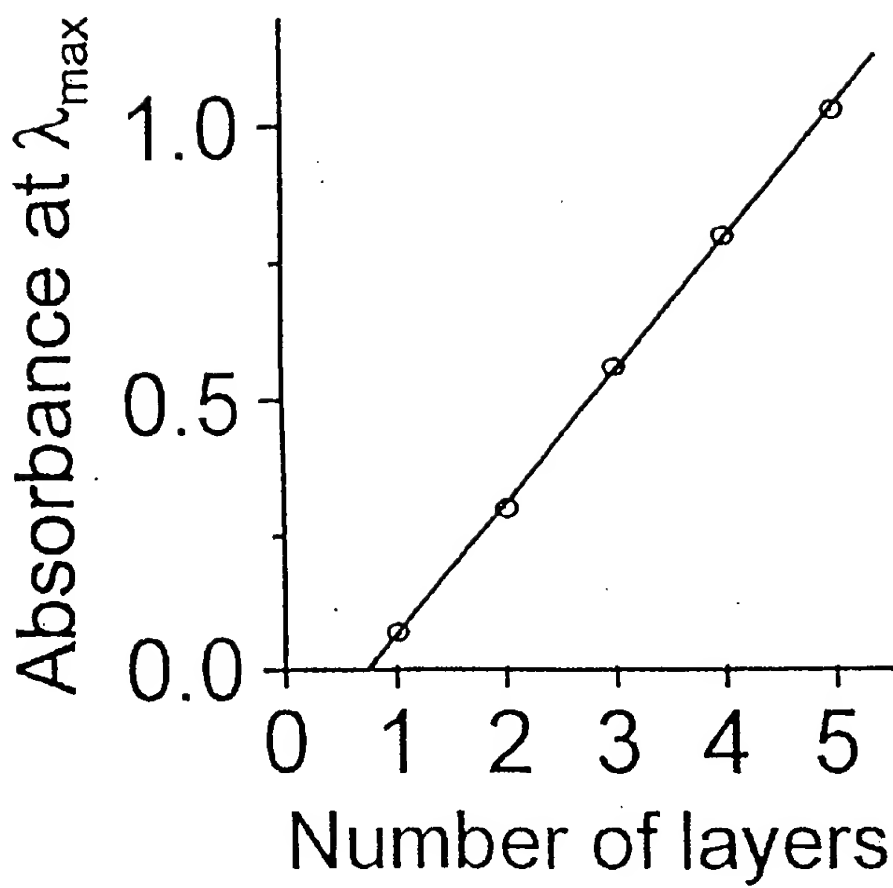


Figure 38B

09976900.401201

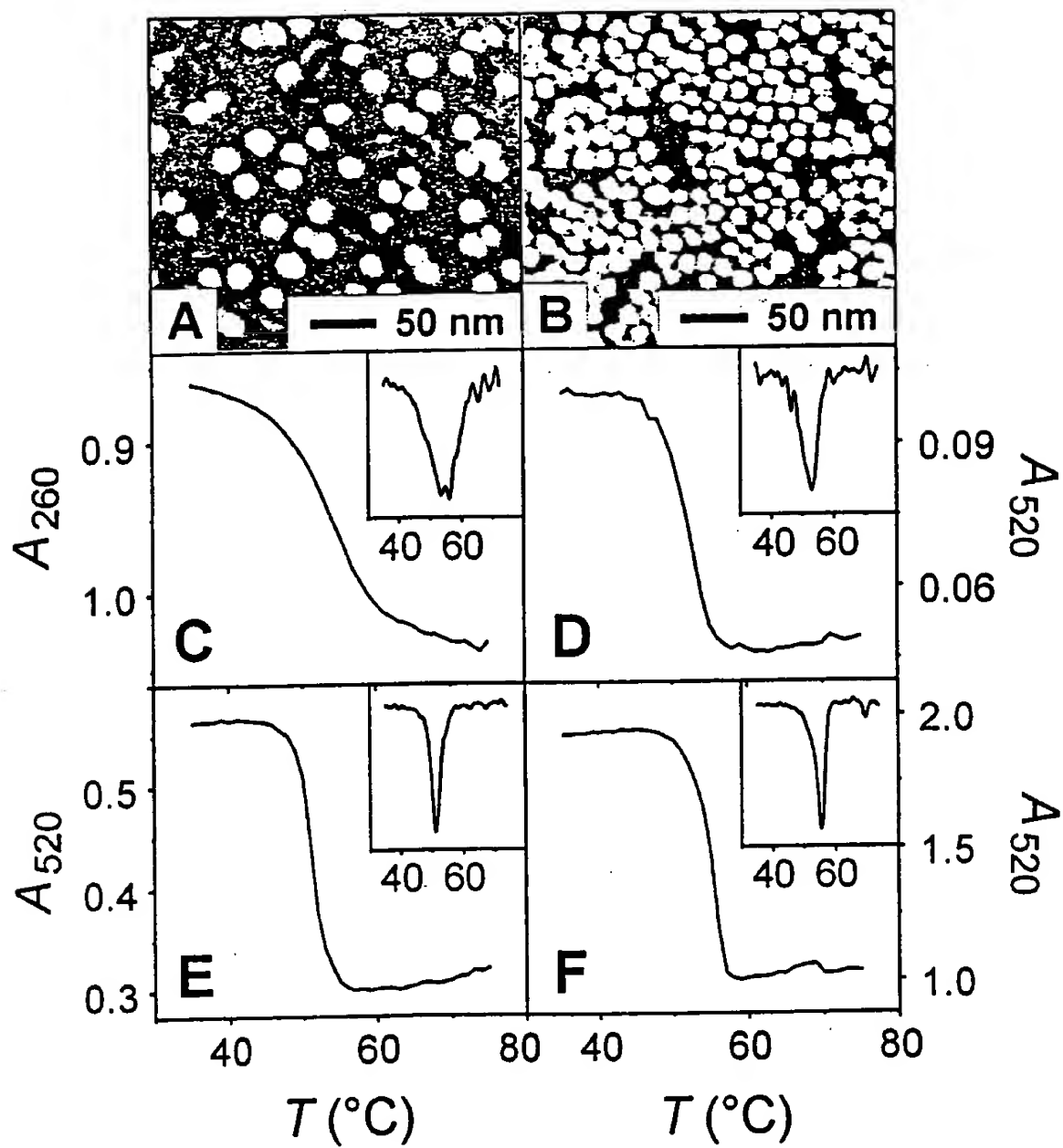


Figure 39

